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ABSTRACT

This workshop facilitator's guide is designed to inform professional staff about competency-based vocational education (CBVE) to help eligible persons on public assistance acquire competencies necessary for gainful employment in the following occupational areas: airline reservations and travel services; computer applications; dental care; emergency medical care; law enforcement and security; office support services; and electronics and robotics. Each program area is 480 hours in length--vocational instruction, 300 hours; job-specific math and reading--120 hours; and employability skills instruction, 60 hours. Each of the eight instructional modules of the Career Development Employment and Training Program (CDETP), also known as Project EDGE, is intended for use as a self-contained inservice training session. A lesson plan for each session contains the following: time required, concepts, instructional objectives, background, materials list, vocabulary, procedures, events, and evaluation. Each lesson plan presents information appropriate for the identified professional competencies, which are found in the introduction to the guide. Handouts and transparencies required for the session are included. Each session takes approximately 1.5 to 2 hours to complete. The minimum time between instructional sessions should be no less than a week. The eight sessions focus on these competencies: (1) explaining CBVE; (2) organizing content for a CBVE program; (3) organizing classroom/laboratory instruction for CBVE; (4) developing written and performance evaluation instruments; (5) using student competency profiles; (6) identifying learning styles; (7) identifying teaching strategies; and (8) guiding students through a CBVE program. A resource list is provided. (YLB)

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Competency Based Vocational Education Workshop Facilitators Guide

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Preface

The Career Development Employment and Training Program (CDETP) is a public and private sector partnership whose goal is to help eligible persons on public assistance and other participants acquire the skills and opportunities necessary for gainful employment. CDET Associates, Inc. and the Career Development Associates, Inc. located in Livonia, Michigan coordinate the program. Public agencies taking part include the Michigan Department of Education, Michigan Department of Social Services, and Michigan Department of Labor (JTPA and MESC). The CDETP program is located at the Ypsilanti Community and Adult Education Center and operated in conjunction with Ypsilanti Public Schools and is known as Project EDGE (Education for Gainful Employment).

Program Philosophy

The philosophy of the Career Development Employment and Training Program (CDETP), hereafter known as Project EDGE, is to help eligible persons on public assistance and other participants acquire the competencies necessary for gainful employment in several occupational areas. Essential to the implementation of this philosophy are six fundamental premises:

1. all participants receive career counseling, vocational assessment, and career information to help them select an appropriate training program.

2. the curriculum content for each training program is competency based and derived from an analysis of the duties and tasks performed by workers in an occupational area.

3. the instruction is organized around performance objectives which are written and given to students in advance of instruction.

4. participant achievement is based upon demonstrated competency which promotes the acquisition of marketable job skills.

5. the instruction is individualized, stresses direct application, and is provided through a variety of instructional methods.

6. each training program covers a range of instruction including basic and vocational skills, personal management and employability skill development

Each training program is structured to meet the unique needs, interests, and abilities of the participants. The principles, concepts, attitudes, and skills necessary to prepare participants to work and advance in an occupation are taught in each training program.

Purpose

The purpose of Project EDGE is to prepare participants to enter and advance into productive careers in the following occupational areas:

Airline Reservations and Travel Services
Computer Applications
Dental Care
Emergency Medical Care
Law Enforcement and Security
Office Support Services
Electronics and Robotics

Each program area is 480 hours in length. Each program includes 300 hours of vocational instruction, 120 hours of job-specific math and reading, and 60 hours of employability skills instruction.

Additional program components include career counseling, placement services for job ready participants, and support services such as child care and transportation.

Goals

The broad goals of Project EDGE are to:

1. provide eligible participants with occupational preparation that will facilitate the development of competent workers for the Michigan labor market,

2. enhance the development of employability skills,

3. develop and reinforce basic skills in such areas as communication, mathematics, human relations, and reading,

4. stimulate participant interest in career development,

5. develop an understanding and appreciation of the work ethic in a competitive workplace and economy.

Introduction to Facilitator Guide

Project EDGE administrators initiated a professional development program to encourage all of the instructional to adopt and use competency based education.

Career Development Associates, Inc. awarded a contract to the Michigan Center for Career and Technical Education (MCCTE) located at Michigan State University for the professional development program. MCCTE subcontracted with Dr. Carl A. Woloszyk, Associate Professor at Western Michigan University to develop and implement a 16 hour in-service program on the use of competency based vocational education for Project EDGE. The major services provided to CDA in the contract included the design and development of appropriate in-service materials and the provision of in-service training of interested staff.

The competencies (duties and tasks) identified for the CBVE Workshop participants were as follows:

Explaining Competency Based Vocational Education (CBVE)

1. identify terminology used in CBVE
2. explain characteristics of CBVE

Organizing Content for a CBVE Program

1. recognize a job task
2. identify methods used to collect job tasks
3. define job task detailing

Organizing Classroom/Laboratory Instruction for CBVE

1. explain the benefits of job task detailing
2. prepare a job task detailing worksheet
3. apply various teaching methods for instruction on a given job task

Developing Written and Performance Evaluation Instruments

1. identify types of performance evaluation instruments
2. list the instructional purposes for criterion reference measures
3. explain the difference between norm and criterion reference measures
4. classify informal and formal evaluation instruments
5. construct written and performance evaluation instruments

Using Student Competency Profiles

1. identify uses for student competency profiles
2. explain the nature of the student competency profile for your program
3. use a student competency profile in your program

Identifying Learning Styles and Teaching Strategies

1. identify effective teaching factors in vocational education

2. identify teaching/learning activities to implement CBVE in your program

3. identify an individual student's learning style

4. use teaching/learning strategies to implement CBVE in a vocational Program

Guiding Students Through a CBVE Program

1. orient students to CBVE

2. use counseling techniques

3. develop individual learning plans

A total of 8 sessions were conducted for interested staff. Each of the 8 instructional modules developed for in-service training are self-contained. Lesson Plans were prepared for each of the sessions. Each lesson plan presents information appropriate for the identified competencies. Each lesson plan contains the following: Time Required, Concepts, Instructional Objectives, Background, Materials, Vocabulary, Procedures, Events, and Evaluation. In addition, handouts and transparencies required for each session are included.

Each session takes approximately one and 1/2 to two hours to complete. The minimum time between instructional sessions should be no less than a week. The ideal arrangement would be to allow two weeks between instructional sessions. The two week period provides sufficient time for the participants to try out the ideas and concepts in their own instructional setting and to bring cogent questions to the next regularly scheduled session.

SESSION 1

Explaining Competency Based Vocational Education (CBVE)

Time Required:

One 1/2 to Two Hours

Concepts:

Competency based vocational education

Instructional Objectives:

Upon completion of this session participants will be able to:

1. identify terminology used in competency based vocational education (knowledge)
2. identify the main components of competency based vocational education (knowledge)
3. explain important characteristics of competency based vocational education (comprehension)

Background:

Competency based or performance based education is intended to improve the teaching-learning process. Competency based education is a classroom management system which permits description in advance the competencies should possess upon completion from a program or course. Competencies are the abilities (including knowledges, attitudes, and skills) needed to perform a specific task successfully to a pre-determined standard. Specifically, competency based vocational education allows for a description in advance of instruction of the knowledge, attitudes, and skills (competencies) that a student should possess for job entry after completion of a vocational program.

A vocational program represents the organization of subject matter and interrelated learning experiences designed to lead students to achieve pre-specified goals and objectives in a systematic way. One of the major goals of vocational education programs is to prepare students for gainful employment and employment advancement. Upon completion of a vocational education program, a student must be able to perform, apply, or use skills on a job.

A competency based vocational education program has the following characteristics:

1. course content is based upon a job analysis of worker tasks,
2. student performance objectives (an activity that can be observed and measured) are known by students in advance of instruction,

3. learning time is flexible,

4. instructional methodology is geared to the individual student, and;

5. student achievement and evaluation is based upon the performance standards needed on the job

Materials:

Handouts

* "Session #1 Agenda"
  Handout #1-1

* "CBVE Workshop Competencies",
  Handout #1-2

* "Who Knows What?????????????",
  Handout #1-3

* "Comparison Between Traditional and Competency-Based Education",
  Handout #1-4

* "Competency Based Vocational Education Glossary",
  Handout #1-5

Transparencies

* "What is CBVE?", Transparency #1-1

* "What is a Program?", Transparency #1-2

* "What is the Major Purpose of Vocational Education?", Transparency #1-3

* "Characteristics of CBVE", Transparency #1-4

* "CBVE Advantages to Students", Transparency #1-5

* "CBVE Advantages to Teachers", Transparency #1-6

* "Misconceptions and Concerns," Transparency #1-7

* "Today we learned that competency based vocational education is ____",
  Transparency #1-8

Vocabulary:

competency based vocational education- occupational training programs in which required knowledges, skills, and/or attitudes (competencies) are specified are known by students in advance of instruction

Procedures

#1. Allow a few minutes at the beginning of the session for Project EDGE administrators to provide a periodic update on program activities.

#2. Greet the participants and focus on instructional objectives for the session and distribute "Session #1 Agenda,". (Handout #1-1) Indicate that the workshop was based upon an earlier professional needs assessment of what Project EDGE participants desired in a staff development program. Explain to participants that this inservice program is a strong indication of support for them as professionals by Career Development Associates. Pass out the "CBVE Workshop Competencies," (Handout #1-2). Provide an overview of the duties and tasks to be learned over the course of the first semester and inform the participants that a total of 16 hours of instruction will occur.

#3. As a "warm-up" activity, pass out the "Who Knows What???" (Handout #1-3). Read the directions together and answer any questions the participants may have regarding the activity. Limit the time of this activity to no more than 5-10 minutes. Tell the participants that you have a "fantastic" prize for the person or persons that can obtain the most names. Bring a small gift as a reward and motivation (i.e. a button "I'm #1, a candy bar "Payday", or a $1 bill). After the allotted time have everyone raise their hands and say "How many people got 5 different names? ... 8 different names? ...10 names?... and so on until the person with the most names is the last person with their hand raised. Have that individual start with the first signed name and term on the list and have the person who signed their name next to the term give the class their definition. Continue the process until all terms have been defined and discussed. Reward the "winning" participant(s) by "coming on down" in front of the group to receive the reward and an applause for their effort.

#4. Introduce the concept of competency based vocational education by using information contained in the **Background section**, of this lesson plan. Discuss with the participants the characteristics, advantages to students, advantages to teachers, concerns and misconceptions by using the information contained on Transparencies #1-1 to #1-7. Summarize the discussion on competency based education by reviewing the key points contained on the "Comparison Between Traditional and Competency-Based Education," (Handout #1-4)

#5. Distribute to each participant the "Competency-Based Vocational Education Glossary", (Handout #1-5). Tell the participants to review the glossary of CBVE terms for the next session.

#6. Evaluate Session #1 by having each participant complete the statement on "Today we learned that competency based vocational education is____". Transparency #1-8

Events:

1. Present update on Project EDGE program activities

2. Provide greeting, CBVE Workshop Competencies, and Session #1 agenda

3. Perform "warm-up" activity as a group activity (Who Knows What???)

4. Discuss individual answers to "warm-up" activity

5. Present information and conduct a discussion on competency based vocational education by using **Background** information and transparencies

6. Review handout comparing traditional and competency based education

7. Summarize session by reminding participants to review the glossary of terms for Session #2. Tell the participants that we will be reviewing the terms, explaining methods of job analysis, and job task detailing during the next session.

8. Evaluate Session #1 by having participants respond to the statement "Today we learned that competency based vocational education is____"

Evaluation:

Perform a formative process evaluation of the session by showing (Transparency #1-8) "Today we learned that competency based vocational education is_____" and by asking the participants to complete the statement. Tell the participants that you will provide a summary of their responses for the next session.

Session #1
Agenda
Faculty In-Service
Date:

Performance Goals:

When you have completed this session you should be able to:

1. explain key components of Project EDGE
2. identify the terminology used in a competency based education program
3. discuss the important characteristics of a competency based education program

Schedule of Activities:	**Time:**
Purpose and Components of Project EDGE	1 hour
What Do You Know About CBE? Terminology	20 minutes
What is Competency Based Education? Concepts and Characteristics	30 minutes
Review and Evaluation	10 minutes
Adjournment	

CBVE Workshop Competencies

Explaining Competency Based Vocational Education (CBVE)

1. identify terminology used in CBVE
2. explain characteristics of CBVE

Organizing Content for a CBVE Program

1. recognize a job task
2. identify methods used to collect job tasks
3. define job task detailing

Organizing Classroom/Laboratory Instruction for CBVE

1. explain the benefits of job task detailing
2. prepare a job task detailing worksheet
3. apply various teaching methods for instruction on a given job task

Developing Written and Performance Evaluation Instruments

1. identify types of performance evaluation instruments
2. list the instructional purposes for criterion reference measures
3. explain the difference between norm and criterion reference measures
4. classify informal and formal evaluation instruments
5. construct written and performance evaluation instruments

Using Student Competency Profiles

1. identify uses for student competency profiles
2. explain the nature of the student competency profile for your program
3. use a student competency profile in your program

Identifying Learning Styles and Teaching Strategies

1. identify effective teaching factors in vocational education
2. identify teaching/learning activities to implement CBVE in your program
3. identify an individual student's learning style
4. use teaching/learning strategies to implement CBVE in a vocational program

Guiding Students Through a CBVE Program

1. orient students to CBVE
2. use counseling techniques
3. develop individual learning plans

Who Knows What ??????????

Directions: You are to circulate among the participants and find a person who can explain one (1) of the following questions. You are to have the person sign their name (no initials, please) next to the question. Try to talk to as many participants as possible in the assigned time. Remember each person can sign your sheet ONLY ONCE.

WHO KNOWS?	SIGNATURE
1. What is affective domain?	_____
2. What is a competency?	_____
3. What is a duty?	_____
4. What is a performance test?	_____
5. What is a performance objective?	_____
6. What is a task?	_____
7. What is a teaching strategy?	_____
8. What is a standard?	_____
9. What is a program?	_____
10. What is a norm referenced test?	_____
11. What is the psychomotor domain?	_____
12. What is a job analysis?	_____
13. What is mastery?	_____
14. What is competency based education?	_____
15. What is a criterion referenced test?	_____
16. What is a course of study?	_____

Transparency 1-1

What is CBVE????
?????????

..... classroom management system which permits description in advance of knowledge, skills and attitudes that a student should possess upon exit from a program or course.

What is a program?

An organization of subject matter and interrelated learning experiences designed to lead students to achieve pre-specified goals and objective on a systematics basis. A program consists of two or more courses.

What is the Major Purpose of Vocational Education?

Major purpose of vocational education is to prepare students for gainful employment and employment advancement. As such the student must be able to PERFORM, APPLY or USE skills on the job.

Characteristics of CBVE

1. Course content based on worker tasks.
2. Performance objectives known in advance
3. Student achievement based on demonstrated competency.
4. Instruction is individualized.
5. More accountability (student and teacher)
6. Learning is guided by feedback
7. Learning time is flexible.
8. Open entry/ open exit program is possible.
9. Criteria - referenced measurement is used.
10 Teacher is a manager.

CBVE Advantages to Students

1. Given credit for what they already know.
2. Able to identify what they need to know or do.
3. Able to proceed at their own rate.
4. Have some choice in how they learn (small, large group or individual.)
5. Accept and are given more responsibility for their learning.
6. Are able to evaluate their own progress accurately.
7. Competing against pre-set standards not other students.

CBVE Advantages to Teachers

1. Student knows in advance of instruction exactly what must be done and how well.
2. Use of a variety of learning activities keeps students more motivated.
3. CBVE provides more freedom and flexibility - more of a manager of instruction.
4. Programs can be designed to accommodate student differences.
5. More accountability to taxpayers, students, and employers.

Misconceptions and concerns about CBVE

1. CBVE is dehumanizing.
2. CBVE forces all students into the same mold.
3. CBVE lowers standards because it allows too many students to get A's
4. CBVE will not work in all VE program areas.
5. CBVE is just another fad.
6. CBVE is too academic and places too much emphasis in reading.
7. CBVE is to much paper work.
8. CBVE eliminates the teacher from the learning - teaching process.
9. CBVE requires new teaching skills.
10. CBVE is just another name for minimum competency testing.

Transparency 1-8

Today we learned that CBVE is:

_____

_____

_____

Session 2

Organizing Content for a CBVE Program

Time Required:

Two to Two 1/2 Hours

Concepts:

duty
job analysis
task
task detailing

Instructional Objective:

Upon completion of this session participants will be able to:

1. recognize a job task (knowledge)
2. identify the methods used to collect job tasks (knowledge)
3. explain the benefits of job task detailing (comprehension)
4. use a job task detailing worksheet to identify the steps and procedures required to perform a job task (application)

Background:

Competency based education prepares students to perform tasks to a predetermined level of performance. In a competency based vocational education (CBVE) program, the tasks performed by a student should be based upon the specific worker tasks performed in the occupational area. To develop a CBVE program, the tasks performed in an occupational area must be identified to establish the competencies, which must be learned by a student. To collect job information, a job analysis is completed, There are three main methods of collecting job information--the questionnaire, interview, and observation.

The questionnaire method requires a worker most familiar with the job to complete a written survey. The success of this method depends on the worker's ability to read and interpret each job task statement correctly. The survey questionnaire works well when the job is not difficult to describe and involves a high degree of psychomotor tasks, Large numbers of workers can be surveyed and information can be obtained quickly, if the survey is precise and clearly worded.

The personal interview involves questioning individuals about their jobs. This method is used when relatively small number of workers are being surveyed, but can be more time-consuming than the written questionnaire. It is used primarily when the job is fairly complicated involving both psychomotor skills, cognitive understandings, and attitudes.

The observation method is used when a person is performing the job at their work station. This method is used when there are a small number of jobs to be observed and the job prevents the worker from leaving it for an interview or to complete a

written questionnaire. It is also helpful when the job is very complex and a survey or interview alone would not be able to collect the information required. Sometimes a combination of one or more of these methods of collecting job information are used to complete a job analysis.

After a job analysis is completed it is necessary to list the steps involved in performing each of the tasks. The identification of the steps involved in the performance of a job task can assist an instructor in identifying the scope, sequence and method of instruction to use in a program. In addition to the steps involved with the performance of a task, it is also necessary to identify the tools, equipment, and other resources needed to teach the task(s).

Materials

* "Session #2 Agenda", Handout #2-1

* "Formative or Process Summaries"
  Handout #2-2

* "Bingo Cards", Handout #2-3 to #2-6 (use with CBVE Vocabulary Terms, Handout #1-5) It is suggested that each Bingo card be a different color paper.

* "Traditional vs CBVE Programs", Handout #2-7.

* "Identify Major Characteristics of CBVE," Handout #2-8.

* "Task Detailing Worksheet," Handout #2-9.

Transparencies

* "Methods of Collecting Job Information", Transparency "2-1.

* "Shampooing and Rinsing Hair (task detailing worksheet)", Transparency #2-2.

* "Today I learned that worker tasks can be identified by___", Transparency #2-3.

Vocabulary:

duty - a grouping of tasks which are related to each other by the nature of the work performed.

job analysis - the method used to gather information about a job, involving observations, interviews and questionnaires. The goal is the development of a detailed description of a job, conditions for performance, and duties and tasks involved

task - a discrete unit of work performed by an individual in the completion of an assigned job duty

task detailing - a listing of the steps involved in performing a job task in terms of what is done; the procedures to follow in completing a job task

Procedures

1 Allow a few minutes at the beginning of the session for Project EDGE administrators to provide a periodic update on program activities.

#2. Greet the participants and focus on instructional objectives for the session and distribute "Session #2 Agenda," (Handout #2- 1).

#3. Have the participants review the formative statements (Today we learned that competency based vocational education is____"), (Handout #2-2), as a review and reinforcement of the concepts covered in Session #1.

#4. As a "warm-up" activity, and review, pass out the "CBVE Bingo Cards", Handouts #2-2 to #2-5. The purpose of this activity is to review key terms from Session #1. Read the definitions in the order identified on Handout #1-5b, i.e. Affective domain becomes Question #1, Competency becomes Q #2, etc. Read each definition and ask the participants to put the number over the term for the definition on their bingo cards). Have the participants play up to two cards. Indicate that not all terms are found on every card and that they should not get discouraged if they have a "bad" card. Play bingo in the usual manner - up and down, diagonal, and horizontal. Do not allow four corner bingo. Encourage participants to call out their bingos and that you have a prize for the "winning" bingo. After a bingo, have the participants identify their bingo (the "C" row, across the bottom, etc.), The leader should read back the numbers by repeating the definition and the participant telling the term, which has been marked. Invariably there are "false bingos", so proceed until the correct bingo is called. The correct bingo should be reached by the 17th term and the card is marked with an asterisk*. This is a fun and exciting way to review and master the terminology for competency based education. Provide a prize or award to the winner as a final activity.

#5. Have the participants work in two person teams to complete the "Traditional vs CBVE Programs", Handout #2-7) Instruct the participants that they can use materials, handouts, and notes from Session #1 to complete this activity. After a brief period of time randomly select teams to report on their answers. Reinforce the answers through discussion and further questioning. Complete the activity and then post-test participants about competency based vocational education by using Handout #2-8. Participants can continue to work as teams, but must reach a consensus response to the items. Have the participants self-check their post test. Each team must score at least 13 out of 15 for mastery.

#6 Introduce the concept of tasks, job analysis, and task detailing by suing information contained in the Background section of this session plan. Reinforce the presentation on job analysis by using the "Methods of Collecting Job Information", (Transparency #2-1).

#7. Present the "Shampooing and Rinsing Hair", (Transparency #2-2) to demonstrate how job task detailing can be used for instruction. Explain that job task detailing is an effective way to organize instruction by determining the enabling objectives for each job task taught in a program. To complete a job task worksheet instructors must determine:

1. the knowing elements of each task
2. the doing element of each task, and;
3. decide on the logical blocks in which to group the knowing and doing elements of each task for instruction.

Have the participants select a partner to work with them to prepare a job task worksheet for the next session in this series. It might be helpful to team academic support instructors with vocational instructors for this activity. Pass out a blank copy of the "Task Detailing Worksheet", Handout #2-9.

8. Evaluate Session #2 by having each participant complete the statement "Today I learned that worker tasks can be identified by ___". Transparency #2-3.

Events:

1. Present update on Project EDGE program activities.

2. Provide greeting and session agenda.

3. Review Session #1 by passing out the summary remarks to the statement, "Today we learned that competency based vocational education is _____".

4. Perform "warm-up" activity for competency based education by playing CBVE Bingo.

5. Divide into two-member teams for activity and post-test activity/discussion.

6. Present information on tasks, job analysis and job task detailing.

7. Select a team for the job task detailing assignment, "Task Detailing Worksheet", Handout #2-9.

8. Summarize session by reminding participants that job task detailing will be continued in the next session.

Evaluation:

Perform a formative evaluation of the session by showing Transparency #2-3 "Today I learned that workers tasks can be identified by_____".

Session #2
Agenda
Faculty In-Service
Date:

Performance Goals:

When you have completed this session you should be able to:

1. explain methods of collecting job tasks

2. detail the steps to be included in the performance of a job task

Schedule of Activities:

Project EDGE Update	15 minutes
Review of Vocabulary, Concepts and Characteristics of CBE	45 minutes
Identify, Verify, and Sequence Job Tasks	45 minutes
Review and Evaluation	15 minutes
Adjournment	

Formative Summaries

Note to facilitator: Each week participants are asked to give their opinion of the session's content by responding to an incomplete statement or sentence stem. This type of evaluation guides the facilitator in assessing concopts that were understood or learned by participants. This type of evaluation also provides the opportunity to clarify any misunderstandings in future sessions and shows the conceptual framework for the participants related to the content covered. It is suggested that each prior weeks comments be prepared and given to the participants as a review and "warm-up" activity for the next session.

The sentence stem from Session #1 was:

"Today I learned that competency based vocational education is
_____

It is suggested that each sentence be identified and read by the participants at the beginning of each session. The suggested format would be as follows:

"Today I learned that competency based vocational education is
_____

"Today I learned that competency based vocational education is
_____

"Today I learned that competency based vocational education is
_____

"Today I learned that competency based vocational education is
_____

This format should include the statements for all the participants. By listing all the responses you tell the participants that their opinions are valued and that their ideas will be discussed, clarified, and expanded upon during subsequent sessions. Accordingly, for the remaining sessions you will see examples of participant responses from previous sessions.

A (product) evaluation should be completed at the end of Session #8. A sample instrument is provided in Session #8 to evaluate the entire CBVE Workshop Series.

C	B	V	E
Criterion Referenced	Affective	Cognitive Domain	Program
Course Outline	Job Analysis	Sequencing	Independent Study
Pre test	Learning Activity Packages	CBVE	Mastery
Curriculum	Task Detailing	Lesson Plan	Duty

C	B	V	E
Affective Domain	Course Outline	Entry level Skills	Competency Profile
Job Title	Competency Statement	Criterion	Learning Activities
Learning Resources	Competency	Task Detailing	CBVE
Independent study	Evaluation	Mastery	Job

C	B	V	E
Duty	Pre-test	Norm-Referenced	Job
Independent Study	Program	Affective Domain	Course of Study
Scope	Learning Activities	Task Detailing	Articulation
CBVE	Sequencing	Criterion	Job Analysis

C	B	V	E
Job Title	Course Outline	Task Detailing	Duty
Individualized Instruction	Articulation	Psychomotor Domain	Learning Activities
Competency	Open entry Open Exit	Task	Post test
Competency Statement	Criterion Referenced	Curriculum	Course Outline

Traditional vs CBVE Program

Directions: Statements about traditional programs are listed below: You are to identify what you think is a major characteristic of CBVE program next to each or the traditional statements.

Traditional Programs	Competency Based Vocational Education
1. Content Based	1._____
2. Time Based	2._____
3. Group Paced	3._____
4. Norm-Referenced Evaluations	4._____
5. Classroom-Based	5._____
6. Group Needs	6._____
7. Delayed Feedback	7._____
8. Subjective Evaluation Criteria	8._____
9. Course Grades as Evidence of Mastery	9._____
10. General Course Objectives	10._____
11. Entrance Prerequisites	11._____
12. Course Content Seldom Made Public	12._____
13. Teacher and Student Attempts to Complete Entire Program	13._____
14. Emphasis on Knowledge and Skills	14._____
15. Student Failure Accepted and Recorded	15._____

Self-Instructional Competency-Based Professional Teacher Training Modules: Manual #1 Identify The Characteristics of a competency Based Vocational Education (CBVE) Program (1985) Developed by The Competency Based Individualized Vocational Education Consortium Addison: Illinois.

Handout 2-7b
Answers

Traditional vs CBVE Program

Directions: Statements about traditional programs are listed below: You are to identify what you think is a major characteristic of CBVE program next to each or the traditional statements.

Traditional Programs	Competency Based Vocational Education
1. Content Based	1. Competency-Based
2. Time Based	2. Performance-Based
3. Group Paced	3. Individually-Paced
4. Norm-Referenced Evaluations	4. Criterion referenced evaluation
5. Classroom-Based	5. Performanced-Based
6. Group Needs	6. Individual Needs
7. Delayed Feedback	7. Immediate Feedback
8. Subjective Evaluation Criteria	8. Objective Evaluation Criterion
9. Course Grades as Evidence of Mastery	9. Mastery of Tasks
10. General Course Objectives	10. Student Performance Objectives
11. Entrance Prerequisites	11. Exit Requirements
12. Course Content Seldom Made Public	12. Tasks Known in Advance of Instruction
13. Teacher and Student Attempts to Complete Entire Program	13. Student Completes Task for Employment
14. Emphasis on Knowledge and Skills	14. Emphasis on Task Performance
15. Student Failure Accepted and Recorded	15. Emphasis on Success Not Failure

Self-Instructional Competency-Based Professional Teacher Training Modules: Manual #1 Identify The Characteristics of a competency Based Vocational Education (CBVE) Program (1985) Developed by The Competency Based Individualized Vocational Education Consortium Addison: Illinois.

Identifying Characteristics of CBVE

Directions: Listed below are 15 statements. Eight of them accurately describe characteristics of CBVE. Place a "T" opposite those which are true about CBVE. You should be able to identify seven correctly.

____1. CBVE is an instructional system designed to improve vocational education.
____2. CBVE is a system in which the teacher is held most accountable for a student's performance.
____3. CBVE emphasizes testing and de-emphasizes instruction.
____4. CBVE emphasizes group instructions primarily based on lecture and demonstration activities.
____5. CBVE is a program in which the performance objectives are made known to the students in advance of instruction.
____6. CBVE emphasizes the related knowledge associated with occupational skills.
____7. CBVE holds the student accountable for achieving passing grades when compared with other students.
____8. CBVE places emphasis on exit requirements of a program or course.
____9. CBVE holds the student accountable for attaining a given level of competency.
____10. CBVE is a system which recognizes that learning occurs over a specific period of time for most students.
____11. CBVE provides for frequent and/or immediate feedback to students.
____12. CBVE holds the performance standards constant and allows time and learning methods to vary.
____13. CBVE is a system which insures that most students will be employable at the end of a specified period of time.
____14. CBVE is based on competencies which are derived from actual worker tasks.
____15. CBVE requires the teacher to perform differently than in a traditional instructional program.

Note: (Reference) - Same source as Handout 2-7

Handout 2-8b
Answers

Identifying Characteristics of CBVE

Directions: Listed below are 15 statements. Eight of them accurately describe characteristics of CBVE. Place a "T" opposite those which are true about CBVE. You should be able to identify seven correctly.

T___1. CBVE is an instructional system designed to improve vocational education.
F___2. CBVE is a system in which the teacher is held most accountable for a student's performance.
F___3. CBVE emphasizes testing and de-emphasizes instruction.
F___4. CBVE emphasizes group instructions primarily based on lecture and demonstration activities.
T___5. CBVE is a program in which the performance objectives are made known to the students in advance of instruction.
F___6. CBVE emphasizes the related knowledge associated with occupational skills.
F___7. CBVE holds the student accountable for achieving passing grades when compared with other students.
T___8. CBVE places emphasis on exit requirements of a program or course.
T___9. CBVE holds the student accountable for attaining a given level of competency.
F___10. CBVE is a system which recognizes that learning occurs over a specific period of time for most students.
T___11. CBVE provides for frequent and/or immediate feedback to students.
T___12. CBVE holds the performance standards constant and allows time and learning methods to vary.
F___13. CBVE is a system which insures that most students will be employable at the end of a specified period of time.
T___14. CBVE is based on competencies which are derived from actual worker tasks.
T___15. CBVE requires the teacher to perform differently than in a traditional instructional program.

Note: (Reference) - Same source as Handout 2-7

Task Detailing Worksheet

Duty:
Task:

Steps in Performing Task	Conditions	Standard	Reference for for Standard

Transparency 2-1

METHODS OF COLLECTING JOB INFORMATION

QUESTIONNAIRE (SURVEY)

1. JOB NOT DIFFICULT TO DESCRIBE
2. PRIMARILY PHYSICAL ACTIVITIES
3. LARGE NUMBER OF EMPLOYEES AND JOBS TO ANALYZE
4. JOB INFORMATION HAS TO BE OBTAINED QUICKLY
5. QUESTIONNAIRE CAN BE CLEARLY WORDED

INTERVIEW

1. SMALL NUMBER OF EMPLOYEES
2. JOB TO BE ANALYZED IS COMPLICATED
3. INTERVIEWER OFTEN OBSERVES JOB WHILE INTERVIEWING
4. JOB IS PRIMARILY HUMAN RELATIONS AND PERSONALITY TRAITS

OBSERVATION

1. EMPLOYEE CAN NOT LEAVE WORK STATION
2. COMPLEXITY OF JOB MAKES IT DIFFICULT TO OBTAIN THROUGH A SURVEY OR INTERVIEW
3. NUMBER OF JOBS TO BE ANALYZED IS SMALL

Transparency 2-2

Task Detailing Worksheet

Duty: F. SHAMPOOING AND RINSING HAIR
Task: F-1 Give plain shampoo

Steps in Performing Task	Conditions	Standard	Reference for for Standard
1. Seat patron comfortably 2. Select and arrange required materials 3. Wash and sanitize hands. 4. Drape patron. 5. Ask patron to remove neck or head jewelry and glasses. 6. Remove all hair pins from hair. 7. Examine condition of patrons hair and scalp. 8. Brush hair thoroughly. 9. Adjust shampoo cape over back of shampoo chair. 10. Adjust volume and temperature of water spray. 11. Wet hair thoroughly. 12. Apply Shampoo. 13. Give Manipulations. 14. Rinse hair thoroughly. 15. Apply shampoo again. 16. Rinse hair thoroughly. 17. Partially towel dry hair.	Given needed equipment and supplies and provided with a patron.	a. Patron is satisfied. b. Oil and soil are removed from hair. c. Soap curds are removed from hair. d. Process completed in about 5 minutes.	Van Dean Manual
Sources Consulted: The Van Dean Manual -- 1974 (pp. 43-45) Standard Text of Cosmetology - 1972 (pp. 45-47)			

Taken from: Cosmetology VTECS Guide (1985) Vocational-Technical Education Consortium of States

SESSION 3

Organizing Classroom/Laboratory Instruction for CBVE

Time Required:

One 1/2 to Two Hours

Concepts:

task detailing
task detailing worksheet

Instructional Objectives:

Upon completion of this session participants will be able to:

1. define job task detailing (knowledge)
2. list the reasons for job task detailing (knowledge)
3. prepare a job task detailing worksheet (comprehension)
4. apply various teaching methods for instruction on a given job task (application)
5. evaluate a job task detailing worksheet (evaluation)

Background:

After an instructor is presented with a job task inventory (job listing) for an occupational program, it is necessary to list the steps involved in performing each of the tasks. The procedure used when performing each of the steps in a job task is called task detailing.

When identifying the steps to include in the performance of a task, an instructor should consider when the task will be performed, what tools and materials will be needed, and how the task will be evaluated. Job task detailing worksheets are often used to assist in identifying the steps used in performing a job task, the conditions, standards, and references.

Task detailing presents all the steps involved with the performance of a job task. The identification of individual steps provides a logical framework for determining the enabling and performance objectives for each job task. Knowing the performance steps provides an instructor with the opportunity to employ various methods of instruction to teach the task.

Materials:

Handouts

* "Session #3 Agenda", Handout #3-1
* "Task Detailing", Handout #3-2
* "20 Teaching Techniques and Why They are Used", Handout #3-3
* "Shampooing and Rinsing Hair Task Detailing Worksheet", Handout #3-4
* "Task Detailing Worksheet", Handout #3-5
* "Product Checklist", Handout #3-6

Transparencies

* "Project EDGE Curriculum Development Model", Transparency #3-1
* "Methods of Collecting Job Information", Transparency #3-2
* "Today I learned that if_____then_____", Transparency #3-3

Other Required Materials

* Several magic markers
* Masking tape
* Newsprint or posterboard

Vocabulary:

task detailing- the process of listing the knowing and doing elements involved in the performance of a job task

task detailing worksheet- a form used to identify the steps in performing a job task, conditions, standards, references and sources used.

Procedures

#1. Allow a few minutes at the beginning of the session for Project EDGE administrators to provide a periodic update on program activities.

#2. Greet the participants and focus on instructional objectives for the session and distribute "Session #3 Agenda", Handout #3-1.

#3. Start session by reviewing the steps in a CBVE curriculum development model by using transparency #3-1, "Project EDGE Curriculum Development Model." Point out to participants that the session will concentrate on Steps #4 and #5, specifically on the detailing of job tasks (performance objectives)

#4. Review the three methods of collecting job task information by using transparency #3-2, "Methods of Collecting Job Information." Indicate the conditions, advantages and disadvantages of each method and that the curriculum guides used for Project EDGE were developed using a combination of these three methods.

#5. Ask participants the reasons for task detailing. Participants should be able to cite how job task detailing can assist with instruction. Refer to Handout #3-2, "Task Detailing" for specific information.

#6. Introduce the concept and importance of using various teaching methods with learners. Randomly ask participants it give their own definition for the teaching techniques identified on "20 Teaching Techniques",(Handout #3-3) Have them identify when you might use each method. After review and discussion pass out the handout and tell them that the handout is a non-inclusive list of techniques. "Brainstorm: additional techniques such as questioning, role-playing, case studies, assignments, cooperative learning groups, etc., which were not identified on the handout.

#7. Distribute "Shampooing and Rinsing Hair Task Detailing Worksheet", (Handout #3-4). Have the participants who detailed job task from the last session date (using handout 3-5) identify their job task detailing steps on a posterboard or newsprint. Place the posterboard or newsprint on the wall and have the participants explain how they teach the particular task and the steps involved in the training. After each participant's explanation, have the other participants compare their teaching method with the method presented.

#8. Pass out the "Product Checklist",(Handout #3-6). Using the Product Checklist handout, evaluate each task worksheet that was completed and explained in step #7 above. Participants need to have answered "Yes" for at least 6 of the 7 items on the checklist for mastery of job task detailing.

Events:

1. Provide greeting and session agenda.

2. Review previous session on job analysis and job detailing.

3. Question participants on teaching methods and uses.

4. Ask participants to explain job task detailing for their program.

5. Brainstorm alternative methods of teaching each job task presented.

6. Evaluate the job task examples by using the Product Checklist (Handout #3-6) and group consensus.

7. Summarize session on importance of job task detailing and tell the participants that Session #4 will cover written and performance evaluation instruments.

Evaluation:

Perform a formative process evaluation of the session by showing Transparency #3-3 "Today I learned that if_____then_____.

Session #3
Agenda
Faculty In-Service
Date:

Performance Goals:

When you have completed this session you should be able to:

1. detail the steps to be included in the performance of a job task
2. construct written and performance evaluation instruments

Schedule of Activities:

Project EDGE Update	15 minutes
Review of Task Analysis Procedures and Job Task Detailing	15 minutes
Discussion of Selected Job Tasks	30 minutes
Written and Performance Evaluations	50 minutes
Review and Evaluation	10 minutes
Adjournment	

Task Detailing

After the job analysis inventory is completed and administered to workers an instructor needs to list the steps involved in performing each of the tasks in terms of what the person does when performing each of the steps. The procedure is called task detailing. Each task performed on the job should be "detailed" and included in your curriculum.

If task detailing is not done, a lot of time may be spent (1) teaching a difficult but relatively unimportant task, (2) teaching a task which is easily taught but not needed on the job, or (3) forgetting to include in the curriculum something that is relatively easy to teach but that is essential to learn. By knowing in detail the job tasks (essential and relatively unimportant) the teacher can decide how thoroughly to teach a given task.

In listing the steps that should be included in the performance of a task, an instructor should consider when the task is to be performed, what tools and materials are needed, and any safety procedures associated with the task. Some steps necessary to performance may not be observable. For example, knowing when to do a task, knowing how to decide what to do, and knowing when the task is done are usually unobservable behaviors but may be required steps in the task.

In order to determine the enabling objectives for each task an instructor must be able to do three things:

* Describe the "knowing" elements of each task
* Describe the "doing" elements of each task
* Group knowing and doing elements of each task.

This process of listing the knowing and doing elements in a task is called task detailing.

Adapted from the Self Instructional Competency -Based Professional Teacher Training Manuals: Manual #2 Indentify, Verify and Sequence Job Tasks (1985) CIVEC, Addison, IL.

20 Teaching Techniques and Why They are Used

1. Lecture -to create interest, influence, impart information, or develop critical thinking.

2. Demonstration- to present proper methods and procedures, introduce new and different techniques, illustrate hard to describe concepts or principles, or stimulate interest in a topic.

3. Questioning- to arouse interest, focus on important details, determine comprehension, clarify information, and encourage divergent thinking.

4. Laboratory- to practice and master specific skills, apply abstract concepts to concrete tasks, and engage in creativity, decision-making, and management skills while developing the ability to work with others.

5. Discussion- to consider new goals and directions of the group, develop a topic of interest to the entire group, and clarify after a lecture or demonstration.

6. Inquiry - to encourage students to be inquisitive and curious, and to learn systematic methods of determining answers for themselves.

7. Assignments- to contribute to student intellectual growth, reinforce learning experiences, and give the student an opportunity to study a topic in depth.

8. Resource Persons- to enhance the educational experience provide to students and generally enrich a lesson.

9. Role-playing-to study human relations problems and group behavior as well as gain insight into their own behavior. Provides an opportunity to discuss values and develop interpersonal competence.

10. Learning Packages- enable each student to proceed at his/her own pace an to accommodate for learning differences.

11. Independent study- to help students become self-directed learners.

12. Structured observations- to ascertain that the students observe all pertinent and important details (field trips).

13. Case method - to resolve problems or derive principles. Opportunity to discuss personal, real problems of people in an objective way.

14. Programmed instruction- to individualize instruction if a program of the appropriate type and reading level is selected.

15. Panel - to develop consensus of the major issues rather than to reach a solution. Stimulates cooperative thinking by offering several views for consideration.

16. Debate- to increase student ability to think critically.

17. Field trip- to expose students to new ideas and to broaden horizons. Help to validate the relevance of in school learning experiences.

18. Brainstorming- to develop the ability to be spontaneous in expression solutions to problems.

19. Microcounseling- to develop more effective interpersonal skills.

20. Using instructional aids- to help illustrate concepts and to clarify them by providing more interesting and motivating experiences.

Adapted From: Teaching Vocational Education to Limited English Proficient Students (1988) Meridian Education Corporation, Bloomington, IL.

Task Detailing Worksheet

Duty: F. SHAMPOOING AND RINSING HAIR
Task: F-1 Give plain shampoo

Steps in Performing Task	Conditions	Standard	Reference for for Standard
1. Seat patron comfortably 2. Select and arrange required materials 3. Wash and sanitize hands. 4. Drape patron. 5. Ask patron to remove neck or head jewelry and glasses. 6. Remove all hair pins from hair. 7. Examine condition of patrons hair and scalp. 8. Brush hair thoroughly. 9. Adjust shampoo cape over back of shampoo chair. 10. Adjust volume and temperature of water spray. 11. Wet hair thoroughly. 12. Apply shampoo. 13. Give Manipulations. 14. Rinse hair thoroughly. 15. Apply shampoo again. 16. Rinse hair thoroughly. 17. Partially towel dry hair. Sources Consulted: The Van Dean Manual -- 1974 (pp. 43-45) Standard Text of Cosmetology - 1972 (pp. 45-47)	Given needed equipment and supplies and provided with a patron.	a. Patron is satisfied. b. Oil and soil are removed from hair. c. Soap curds are removed from hair. d. Process completed in about 5 minutes.	Van Dean Manual

Taken from: Cosmetology VTECS Guide (1985) Vocational-Technical Education Consortium of States

Task Detailing Worksheet

Duty:
Task:

Steps in Performing Task	Conditions	Standard	Reference for for Standard

Product Checklist
Task Detailing

Items to be Observed or Checked	Rating: Yes	Rating: No
1. Stated all steps required to perform the task.		
2. Used a compete sentence statement.		
3. Used an action verb to begin each step.		
4. Listed the steps in a logical order to complete the task.		
5. Used terminology consistent with current usage in occupational field.		
6. Detailed both "knowing" and "doing" elements of each task.		
7. Assigned a number to each task.		

This checklist may be used to evaluate your task detailing lists.

Transparency 3-1

Project EDGE Curriculum Development Model

1. Conduct a feasibility study (using MESC data).

2. Adopt tasks through purchase of existing curricula for each program selected.

3. Modify task list for Project EDGE Clients

4. Construct a job task detailing worksheet for selected tasks.

5. Write, adopt/adapt performance objectives

6. Develop, adopt/adapt criterion referenced measures

7. Develop, adopt/adapt learner activity materials (print and media)

8. Validate or field test learner activity materials

9. Enter information into records management and reporting system.

10 Implement CBVE program and evaluate learner activity materials

11. Review evaluation data and revise the materials.

METHODS OF COLLECTING JOB INFORMATION

QUESTIONNAIRE (SURVEY)

1. JOB NOT DIFFICULT TO DESCRIBE
2. PRIMARILY PHYSICAL ACTIVITIES
3. LARGE NUMBER OF EMPLOYEES AND JOBS TO ANALYZE
4. JOB INFORMATION HAS TO BE OBTAINED QUICKLY
5. QUESTIONNAIRE CAN BE CLEARLY WORDED

INTERVIEW

1. SMALL NUMBER OF EMPLOYEES
2. JOB TO BE ANALYZED IS COMPLICATED
3. INTERVIEWER OFTEN OBSERVES JOB WHILE INTERVIEWING
4. JOB IS PRIMARILY HUMAN RELATIONS AND PERSONALITY TRAITS

OBSERVATION

1. EMPLOYEE CAN NOT LEAVE WORK STATION
2. COMPLEXITY OF JOB MAKES IT DIFFICULT TO OBTAIN THROUGH A SURVEY OR INTERVIEW
3. NUMBER OF JOBS TO BE ANALYZED IS SMALL

Transparency 3-3

Today I learned that if:

then:

Today I learned that if:

then:

Session #4

Developing Written and Performance Evaluation Instruments

Time Required:

Two 1/2 to Three Hours

Concepts:

Performance evaluation instruments
Criterion reference measure
Norm reference measure
Formal evaluation instruments
Informal evaluation instruments

Instructional Objectives:

Upon completion of this session participants will be able to:

1. identify types of performance evaluation instruments (knowledge)
2. list the instructional purposes for criterion reference measures (knowledge)
3. explain the difference between norm and criterion reference measures (comprehension)
4. classify informal and formal evaluation instruments (analysis)
5. construct written and performance evaluation instruments (synthesis)
6. evaluate written performance measures (evaluation)

Background:

Two types of evaluation instruments are used with competency based vocational education programs. Written criterion instruments are used to assess the cognitive aspects of task performance. Performance evaluation instruments are used to measure the psychomotor aspects of task performance.

Criterion reference measures have several characteristics. The job task (performance objective) with related conditions and criteria actually describes the testing or evaluation situation. Criterion reference measures are written before instruction begins. Since criterion reference measures are known in advance of instruction much of the "second quessing" by learners before an evaluation is eliminated. Criterion reference measures determine in a very objective way, if the learning has taken place.

Criterion reference measures are used to diagnose, evaluate, motivate, predict, and counsel learners. Formal and informal instruments can be used by instructors to assess learner performance. Informal instruments such as assignments, study sheets, and oral questioning are used to give the learner feedback regarding the cognitive aspects of a particular task. Formal instruments such as written tests, product and performance checklists are used to evaluate the learner has mastered a task.

Materials:

Handouts

* "Session #4 Agenda", Handout 4-1
* "Summative Evaluations for CBE Workshop III", Handout 4-2
* "54 Number Scramble", Handout 4-3
* "54 Number Framework", Handout 4-4
* "Testing", Handout 4-5
* "Why Use Criterion Reference Measures?" Handout 4-6
* "What Do You See?", Handout 4-7
* "Dental Care Program-Demonstrate Interpersonal Skills", Handout 4-8

Transparencies

* "Why Test?", Transparency 4-1
* "Components of multiple choice items", Transparency 4-2
* "Plausible Distractors", Transparency 4-3
* "Stems Contain Bulk of Content", Transparency 4-4
* "Stems Should be Self-Contained", Transparency #4-5
* "Common Types of Clues", Transparency 4-6 thru 4-13
* "Performing Coordination Activities (product checklist)", Transparency #4-14
* "Type a Letter in Full Block Style (product checklist)", Transparency #4-15
* "Give Patient a Back Rub (performance checklist)", Transparency #4-16
* "Today I learned that written and performance evaluations are ____.", Transparency #4-17

Vocabulary:

criterion reference measure- a test (measure) constructed to yield an assessment that is directly linked to specified performance standards. An individual's performance is compared to a criterion (work or performance standard), rather than a relative standard such as class standing.

norm reference measure- a test (measure) in which a learner's score is compared to the performance of other students taking the test.

performance checklist- an achievement record rating the process or procedures used to actually perform a job task using materials and equipment. i.e give a patient a back rub

product checklist- an achievement record rating the final product of a learner's performance. i.e. type a letter in full block style

Procedures

#1. Allow a few minutes at the beginning of the session for Project EDGE administrators to provide a periodic update on program activities.

#2. Greet the participants and focus on instructional objectives for the session and distribute "Session #4 Agenda", (Handout 4-1).

#3. As a "warm-up" activity distribute the "Summative Evaluation of CBVE Workshop III", (Handout 4-2) and have participants review them. This handout represents a possible sample of responses. The workshop facilitator should prepare a summary of actual participants responses in the format suggested.

#4. Pass out the "54 Number Scramble", (Handout 4-3) face down. Tell participants not to look at the handout until told to do so. Explain that the participants have only one minute to find as many numbers in sequence as possible by pointing to each consecutive number or by circling, drawing or otherwise indicating the proper sequence. After one minute ask the participants their individual scores. Solicit the highest scores. Passout "54 Number Framework", (Handout 4-4) and use same procedure as above. After one minute, tabulate the responses. Discussion on a systematic approach to instruction (CBE) can improve student performance. The total number of responses should increase when the "54 Number Framework" is used. Participants will see a pattern or structure leading to improved performance.

#5. Have participants number off into pairs. Pass out "Testing", (Handout 4-5) as a pre-test. Have each pair spend time completing the handout. Elicit oral responses from each team and have participants record responses. After all responses are recorded, distribute "Why Use Criteria Reference Measures", Handout 4-6. Tell participants to review both handouts for Session #5. Participants must obtain a passing score of 85% to demonstrate mastery of content knowledge.

#6. Present transparencies #4-1 to #4-13 in lecture format. Review basic principle of developing written criterion testing measures. Use pre-existing teams to distribute "What do You See?", Handout 4-7. Provide 15 minutes for each team to record what they see is wrong with each written criterion measure. Elicit responses to the handout by calling on each team in a random fashion. Consult answer key (Handout 4-9) to assist with discussion.

#7. Distribute "Dental Care - Demonstration Interpersonal Skills" Handout 4-8, student competency record. Indicate that there are two types of performance evaluation checklists (product and process). Give examples of each by using transparencies #4-14 thru #4-16. Indicate that each instructor should develop a checklist for each performance task. Instructors are assisted in this effort by consulting the job task detailing worksheet used to teach the task. If possible show several examples of product and process checklists.

Events:

1. Provide greeting and distribute session #4 agenda.

2. Perform "warm-up" activity for each individual (54 Numbers).

3. Review the importance of CBE and criterion reference testing.

4. Divide into two-member teams for pre-test activity/discussion.

5. Present information on written multiple choice items. (Transparencies)

6. Divide into two-member teams for written test item analysis. (What Do You See?)

7. Present information on product and performance checklists.

8. Summarize session by reminding participants of written evaluation on testing for Session #5. Tell the participants that you will use the "testing" handout presented during this session as final evaluation instrument.

Evaluation:

Perform a formative evaluation of the session by showing Transparency #4-17 "Today I learned that written and performance evaluations are_____".

Session 4
Agenda
Faculty In-Service
Date:

Performance Goals:

When you have completed this session you should be able to:

1. construct written and performance evaluation instruments
2. explain student competency records for your program

Schedule of Activities:

Project EDGE Update	15 minutes
Why Test?	15 minutes
Discussion of Criterion Reference Measures	15 minutes
Developing/Critiquing Written Performance Evaluations	45 minutes
Student Competency Records	20 minutes
Review and Evaluation	10 minutes
Adjournment	

Summative Evaluation of CBE Workshop III

In response to the question:

Today I learned that if I _____ then _____.

Example: Today I learned that if I develop a sequence of steps for performing a task, then I will be able to easily develop achievement evaluation indicators for that task.

Today, I learned that....
if : I plan well
then : the students will learn well

Today, I learned that.....
if : I follow through on "assignments" from last week, after meeting with Mary Clare and doing the homework
then : I can see the results of a duty/task model and get a discussion of how well we did.

Today, I learned that.....
if : I use a greater variety of teaching techniques,
then : I would keep interest of more students and make my lessons more beneficial to the students, reaching more students and teaching to varied learning styles.

Today, I learned that.....
if : the competencies are listed
then : it is easier to evaluate the performance

Today, I learned that.....
if : a duty/task has been labeled in a direct order with specifics named
then : I can draft an achievement criteria/level

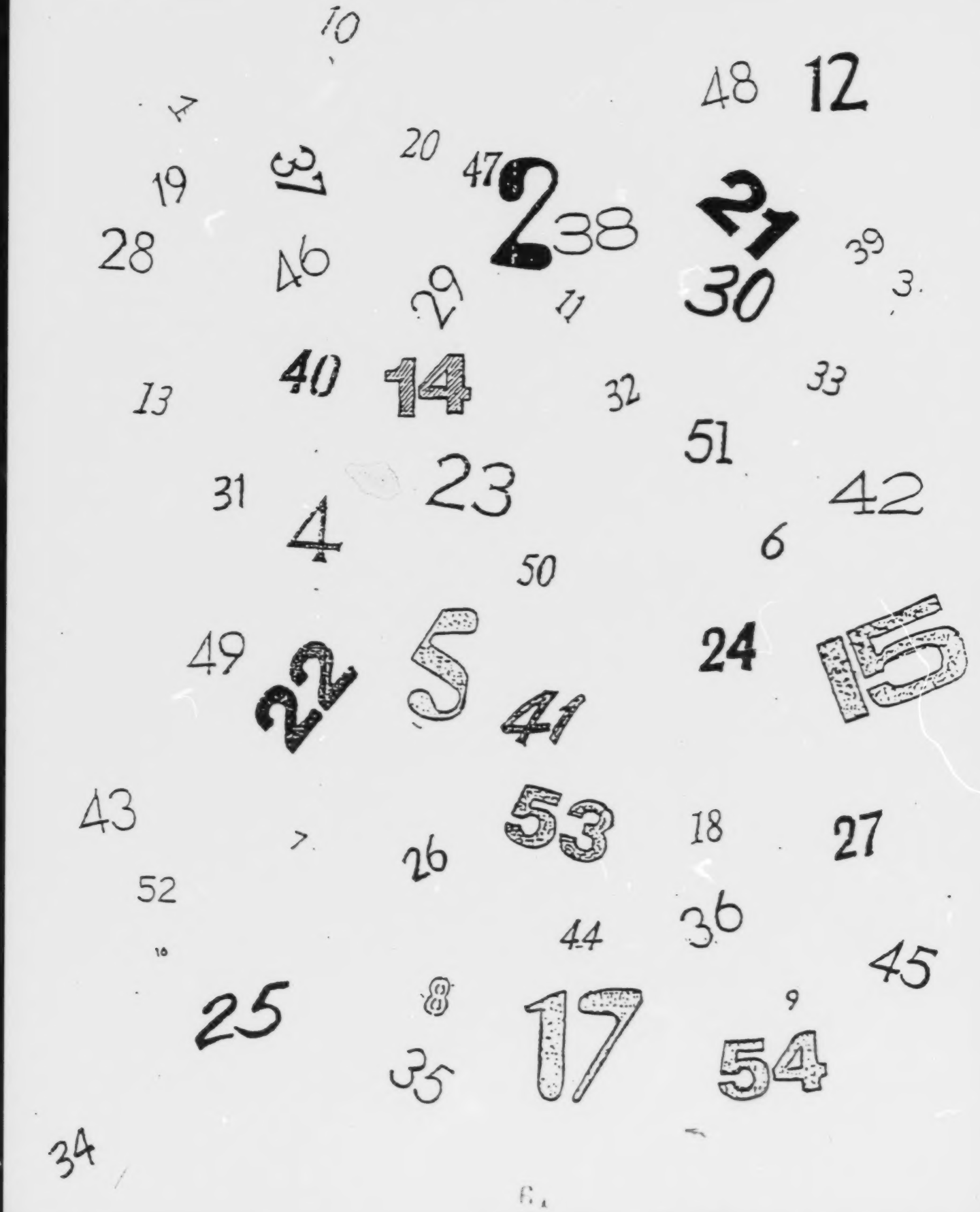
Today, I learned that.....
if : if use more hands-on exercises,
then : my students will learn more readily.

Today, I learned that.....
if : competency based education happens if I evaluate if the student has completed the task.
then : they have reached competency.

Extra Notes:

Thank's for that handout, I learned more but wasn't able to express it in the format given. Good session!!

I can teach.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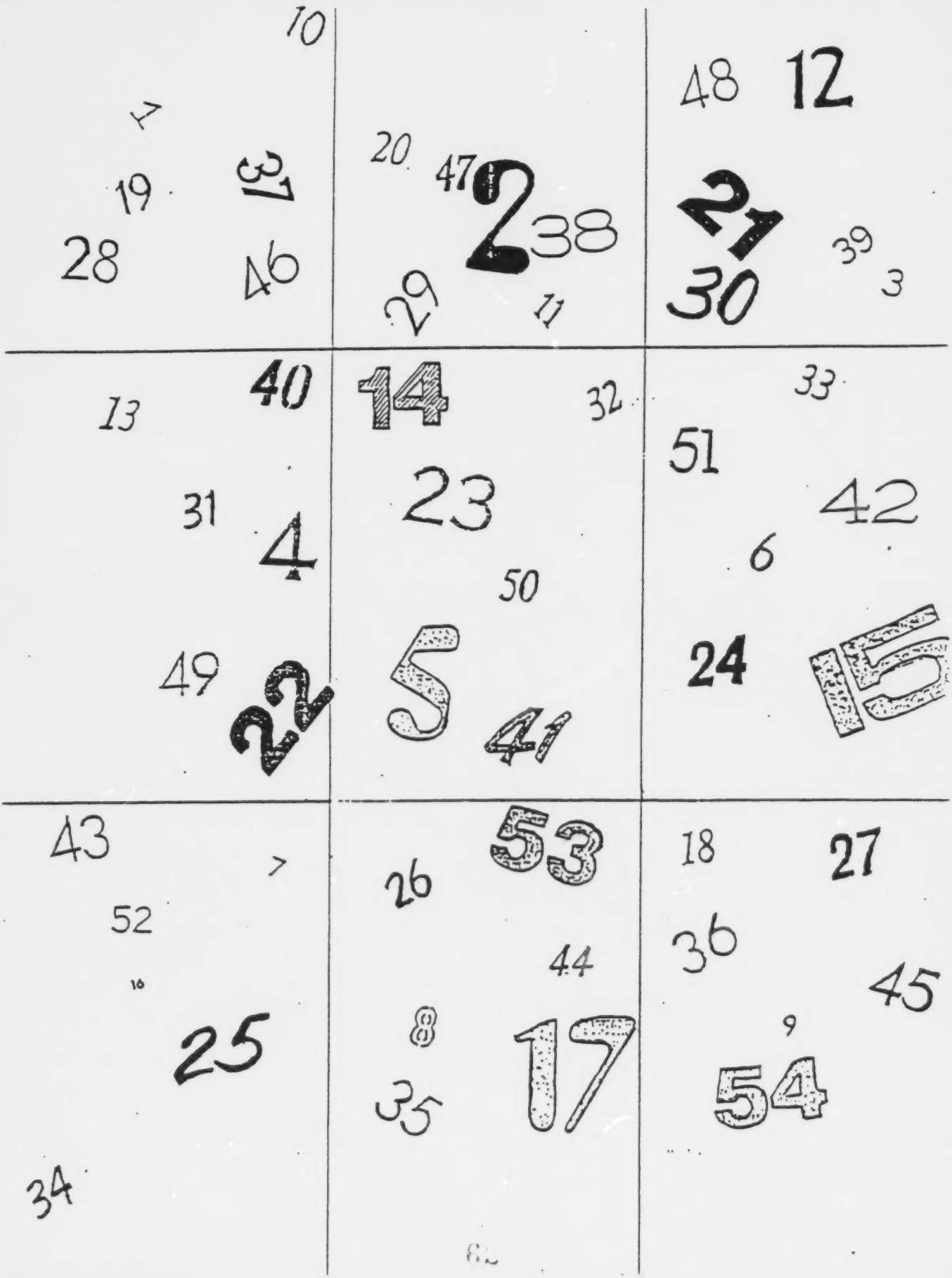
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Testing

Directions: Please complete the following in your own words.

1. List the two types of performance evaluation instruments.

_____

_____

_____

2. Describe what is meant by a criterion-referenced measure (CRM).

_____

_____

_____

3. What is the difference between a criterion-referenced test and norm-referenced test?

_____

_____

_____

4. List three instructional purposes for using CRM's.

a. _____

b. _____

c. _____

5. List three informal instruments used in vocational programs.

a. _____

b. _____

c. _____

6. List three formal evaluation instruments used in vocational programs.

a. _____

b. _____

c. _____

Handout 4-5b
(Answers)

Testing

Directions: Please complete the following in your own words.

1. List the two types of performance evaluation instruments.

   A. Written tests.

   B. Performance checklists or practical skills tests.

2. Describe what is meant by a criterion-referenced measure (CRM).

   Used to assess student performance. The measure relates to the criteria statement of the performance objective.

3. What is the difference between a criterion-referenced test and norm-referenced test?

   Norm-referenced tests compare an individual's achievement to other's achievement within a group. CRT's are used to measure a student's accomplishment against pre-set standards and not other students.

4. List three instructional purposes for using CRM's.

   Diagnosis Motivation

   Assessment Placement

   Evaluation Predication

5. List three informal instruments used in vocational programs.

   A. Activity sheets

   B. Study Questions

   C. Oral quizzes

6. List three formal evaluation instruments used in vocational programs.

   A. Written criterion exams

   B. Product checklists

   C. Performance checklists

Why Use Criterion - Referenced Measures?

1. Instructional Uses

   A. Diagnosis - to diagnose learning difficulties, strengths, and weaknesses
   B. Assessment - to assess knowledge and skill gained and behavioral change
   C. Evaluation - to provide feedback
   D. Motivation - to motivate
   E. Placement - to counsel students
   F. Prediction - to predict future successes

2. Administrative uses

   A. To pre-test students
   B. To determine readiness for advanced training
   C. To grade students
   D. To eliminate students from a program
   E. To establish readiness for advanced training
   F. To recycle trainees
   G. To determine trainee assignments
   H. To inform line managers and supervisors about the accomplishments of their subordinates.

3. Planning and Development uses

   A. To pre-test system components
   B. To perform comparative cost analysis
   C. To determine system prerequisites

What types of evaluation instruments are used to assess student performance?

There are two types of evaluation instruments used to assess performance and to provide feedback to the student and instructor. These are informal instruments and formal instruments.

Some examples of Informal Evaluation Instruments are:

1. Activity Sheets
2. Study Questions
3. Oral Quizzes

Some examples of Formal Evaluation Instrument are:

1. Written Criterion Exams
2. Product Checklists
3. Performance Checklists
4. Product/Performance Checklists

The informal instruments are used to give feedback to the student regarding the cognitive aspects of a task. Each time the student is asked to read, view a film, or attend a presentation, an informal evaluation instrument might be used to assist them in organizing their thought and to check their understanding of the materials.

The formal instruments are given to the students to determine whether or not the task has been mastered. Written exams are normally objective tests which can be easily hand or machine scored. The purpose of a written exam is to determine whether or not the student understands the knowledge aspects of a task. Product and or performance checklists are used to evaluate student performance of the "doing" aspects of a task.

What Do You See?

Directions: Please review each of the following test items to determine what, if any, problems(s) you see with each question and/or key. Write a description of the problem and how it could be fixed in the space provide following the test key. When you have finished, wait patiently for your peers, we'll discuss each question.

Question 1:

Competency: Explain the nature of sales training. (SE:055)

A disadvantage of decentralized instruction is

A. moderate pace of instruction.
B. lower costs.
C. lack of consistency in instruction.
D. more realistic training.

C. Lack of consistency in instruction. Instruction is a decentralized setting may suffer from a lack of consistency since there may be no formal control over sales training process. Since fewer people are involved, the instruction may proceed at a more moderate pace. More realistic training can be provided since the location is closer to the customer. Costs are cheaper in decentralized training.

Question 2:

Competency: Follow safety precautions. (RM:010)

The area of a store that should always be kept clean of obstructions, and well lighted is the

A. Freight area.
B. Fixture room.
C. Fire corridor.
D. Personnel area.

C. Fire corridor. All areas should be well kept, but the fire corridor should always be in the state for safety's sake.

Question 3:

Competency: Prepare complex written reports (CO:009)

A magazine considered to be an authority in the area of display is

A. Buyer's Guide
B. Media/Scope
C. Potentials
D. Marketing Communications

A Buyer's Guide. Display World is also a magazine considered to be an authority in the area of display. Media/Scope is a magazine designed for advertising. Marketing Communications and Potentials are magazines that are considered to be authorities in the area of sales.

Question 4

Competency: Promote through publicity/public relations (PR:055)

To improve public relations, the manager is offering the use of hotel facilities for charity. Which of the following would be considered a bona fide charity:

A. The Suburban Garden Club
B. The Society of Retarded Children
C. The United Electrical Workers
D. The Committee to Re-Elect the President

B The Society for Retarded Children. The main goal of the organization is to aid those in need, whereas the alternatives have union, political, or personal goals.

Question 5:

Competency: Explain the purpose and importance of selling (SE:017)

Selling is

A. responding to consumer needs and wants through planned, personalized communication in order to influence purchase decisions and ensure satisfaction.

B. communicating information about goods, services, images, and/or ideas to influence purchase behavior.

C. determining the exchange price at which the buyer and seller perceive optimum value for the good or service.

D. managing marketing activities to optimize the relationships of potential loss to gain.

A Responding to consumer needs and wants through planned, personalized communications in order to influence purchase decisions and ensure satisfaction. Selling include such topics as understanding customers/clients, processes and techniques of selling, time and activity planning and knowledge of product and service. Promotion involves communicating information about goods, services, images and/or ideas to influence purchase behavior. Pricing involves determining the exchange price at which the buyer and seller perceive optimum value for the good or service. Risk management involves managing marketing activities to optimize the relationships of potential loss to gain.

Question 6:
Competency: Determine processing priorities (DS:006)

The term demurrage is

A. the holding of a truck beyond the scheduled loading or unloading time.

B. a sedate, reserved customer.

C. a cosmetic foundation used to cover severely damaged areas such as scars.

D. a buying term for large quantity, discount purchases.

A Demurrage is the term used when a truck or other cargo vehicle has been held longer than the scheduled loading or unloading time. A charge is often assessed for this.

Question 7:

Competency: Process returned/damaged product (DS:009)

All apparel store record the receipt of clothing and accessory shipments on a

A. invoice.
B. packing slip
C. receiving record.
D. credit memorandum.

C The receiving record or receiving log is used to record the information about a shipment received by a store.

Note: Permission has been granted to use this handout which was originally developed by Ms. Beth Osteen Curriculum Consultant, Marketing Education Resources Center, Inc. 1375 King Ave. Columbus, OH 43212

What Do You See?

Directions: Please review each of the following test items to determine what, if any, problems(s) you see with each question and/or key. Write a description of the problem and how it could be fixed in the space provide following the test key. When you have finished, wait patiently for your peers, we'll discuss each question.

Question 1:

Competency: Explain the nature of sales training. (SE:055)

A disadvantage of decentralized instruction is

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B. lower costs.
C. lack of consistency in instruction.
D. more realistic training.

C. Lack of consistency in instruction. Instruction is a decentralized setting may suffer from a lack of consistency since there may be no formal control over sales training process. Since fewer people are involved, the instruction may proceed at a more moderate pace. More realistic training can be provided since the location is closer to the customer. Costs are cheaper in decentralized training.

Problem(s): 1) All the distractors are positives.. The only negative or disadvantage is the correct answer. 2) Distractors are not parallel in length

Question 2:

Competency: Follow safety precautions. (RM:010)

The area of a store that should always be kept clean of obstructions, and well lighted is the

A. Freight area.
B. Fixture room.
C. Fire corridor.
D. Personnel area.

C. Fire corridor. All areas should be well kept, but the fire corridor should always be in the state for safety's sake.

Problem(s): 1) All alternatives are viable 2) Need more detail in answer key 3) Try to avoid absolutes (always) 4) Area in stem is a specific determiner in two of the alternatives.

Question 3:

Competency: Prepare complex written reports (CO:009)

A magazine considered to be an authority in the area of display is

A. Buyer's Guide
B. Media/Scope
C. Potentials
D. Marketing Communications

A Buyer's Guide. Display World is also a magazine considered to be an authority in the area of display. Media/Scope is a magazine designed for advertising. Marketing Communications and Potentials are magazines that are considered to be authorities in the area of sales.

Problem(s) 1.) Question does not relate to the competency 2) "Display World" is the key is not a distractor 3) distractors should be alphabetized.

Question 4

Competency: Promote through publicity/public relations (PR:055)

To improve public relations, the manager is offering the use of hotel facilities for charity. Which of the following would be considered a bona fide charity:

A. The Suburban Garden Club
B. The Society of Retarded Children
C. The United Electrical Workers
D. The Committee to Re-Elect the President

B The Society for Retarded Children. The main goal of the organization is to aid those in need, whereas the alternatives have union, political, or personal goals.

Problem(s) 1) Key is incomplete 2) Testing insignificant information 3) testing of knowledge not directly related to competency statement 4) All distractors are not plausible.

Question 5:

Competency: Explain the purpose and importance of selling (SE:017)

Selling is

A. responding to consumer needs and wants through planned, personalized communication in order to influence purchase decisions and ensure satisfaction.

B. communicating information about goods, services, images, and/or ideas to influence purchase behavior.

C. determining the exchange price at which the buyer and seller perceive optimum value for the good or service.

D. managing marketing activities to optimize the relationships of potential loss to gain.

A Responding to consumer needs and wants through planned, personalized communications in order to influence purchase decisions and ensure satisfaction. Selling include such topics as understanding customers/clients, processes and techniques of selling, time and activity planning and knowledge of product and service. Promotion involves communicating information about goods, services, images and/or ideas to influence purchase behavior. Pricing involves determining the exchange price at which the buyer and seller perceive optimum value for the good or service. Risk management involves managing marketing activities to optimize the relationships of potential loss to gain.

Problem(s): 1) incomplete stem...bulk of questions should be contained in stem 2) alternatives are too long ... should be kept brief.

Question 6:
Competency: Determine processing priorities (DS:006)

The term demurrage is

A. the holding of a truck beyond the scheduled loading or unloading time.

B. a sedate, reserved customer.

C. a cosmetic foundation used to cover severely damaged areas such as scars.

D. a buying term for large quantity, discount purchases.

A Demurrage is the term used when a truck or other cargo vehicle has been held longer than the scheduled loading or unloading time. A charge is often assessed for this.

Problem(s): 1) Vocabulary "Demurrage" is difficult to understand 2) incomplete stem 3) incomplete answer key 4) Question does not relate to competency statement.

Question 7:

Competency: Process returned/damaged product (DS:009)

All apparel store record the receipt of clothing and accessory shipments on a

A. invoice.
B. packing slip
C. receiving record.
D. credit memorandum.

C The receiving record or receiving log is used to record the information about a shipment received by a store.

Problem(s) 1) Grammatical inconsistency .. The word "an" tells that "invoice" is correct answer 2) Incomplete stem 3) Distractors are not parallel in length (2 words vs 1 word in alternatives) 4) Distractors are not alphabetized.

Note: Permission has been granted to use this handout which was originally developed by Ms. Beth Osteen Curriculum Consultant, Marketing Education Resources Center, Inc. 1375 King Ave. Columbus, OH 43212

Transparency 4-1

Why Test?

1. to motivate students

2. To determine process

3. To determine grades

4. To evaluate effectiveness

    * teaching
    * teaching methods
    * planned learning experiences
    * materials

Components of Multiple Choice Items

Stem: On the color wheel, red, yellow, and blue are known as _____

Correct Response	a. primary
	Alternatives
	b. secondary
Distractors	c. tertiary
	d. analogous

Key: Primary. .....

Plausible Distractors

* Define the class to which all of the alternatives belong.

* Think of things that have some association with the terms in question.

* Phrase the question so that it calls for a "yes" or "no" answer plus and explanation.

* Use various combinations of two elements as the alternatives.

Stems Contain Bulk of Content

A1 Lengthy Alternatives

The term "economic services" is defined as

A. intangible activities performed by other people for money.

B. tangible objects capable of satisfying human wants and needs and which have monetary value.

C. desires for things that are essential to one's survival.

D. wants for things that normally involve no monetary cost.

A2. Brief Alternatives

Intangible activities performed by other people for money defines the term

A. economic services.

B. economic goods.

C. primary wants.

D. noneconomic wants.

A. Stems should be Self-Contained.

Example:

Poor: Cholesterol:

A. is a fat soluble vitamin
B. is a like substance made in the body
C. found in fruit, vegetable, and cereals
D. a major factor in heart disease

Better:

A fat like substance made in the body and also found in foods of animal origin is called:

A. blood serum
B. cholesterol
C. heperin
D. sodium

Common Types of Clues

A. Grammatical Inconsistencies

Specific numbers which are to be added together are referred to as

A. addends.
B. addition.
C. sum.
D. total.

B. Verbal Associations

A sales message, directed at a mass audience, that seeks to sell goods or services on behalf of the paying sponsor is called an

A. display
B. advertisement.
C. creative selling.
D. public relations techniques.

continued

Common Types of Clues (continued)

D. Chaining

Gross National Product can best be described as the total dollar value of

A. goods and services produced in the U.S. for sale in foreign countries.

B. goods and services produced in foreign countries for sale in the U.S.

C. all of the economic resources available to a country.

D. all goods and services produced by a country in a year.

The letter GNP stand for

A. Gross National Profit.

B. Gross Net Pay.

C. Gross National Product.

D. Gross Net Price.

continued

Common Types of Clues (continued)

E. Length Variations

How did styles in women's clothing in 1950 differ most from those in 1900?

A. They showed more beauty.

B. They showed more variety.

C. They were easier to clean.

D. They were easier to live in, to work in, to move in, and were generally less restrictive.

continued

F. Do Not Give Clues to the Answer ("Klang" association)

Example

Poor:

What is the best way to locate a lawyer for assistance?

A. ask a police officer

B. call a bail bonding agency

C. contact a lawyer referral agency

D. look for an ad in the phone book

Better:

What is the best way to locate a lawyer for assistance?

A. ask a police officer

B. call a bail bonding agency

C. contact a legal referral agency.

D. look for an ad in the phone book.

G. Do Not Use Negative Wording

Example

Poor:

A paraffin dip may not be used as a treatment for:

A. arthritis

B. Hepatitis

C. Herpes

D. Shingles

Better:

A paraffin dip may not be used as a treatment for:

A. arthritis

B. Hepatitis

C. Herpes

D. Shingles

Better Still:

A paraffin dip may be used as a treatment for:

A. arthritis

B. Hepatitis

C. Herpes

D. Shingles

H. Create a logical order in the responses (numerical responses either in decreasing or increasing order; names or single-word options in alphabetical order)

Example:

Poor:

A heat lamp should be placed at least ___ inches from the patient to prevent burns:

A. 6 - 10 inches
B. 24 - 36 inches *
C. 12 - 14 inches
D. 48 - 60 inches

Better:

A heat lamp should be placed at least ___ inches from the patient to prevent burns:

A. 6 - 10 inches
B. 12 - 14 inches
C. 24 - 36 inches *
D. 48 - 60 inches

* Correct Answers

I. Do not use absolutes (Avoid using all, always, only, and never)

Example:

Poor: Which of the following is characteristic of all plants?

A. they bear seeds

B. they contain nonwoody stems

C. they have multicellular parts

D. they produce chlorophyll *

Better:

Which of the following is characteristic of green plants?

A. they bear seeds

B. they contain nonwoody stems

C. they have multicellular parts

D. they produce chlorophyll *

* correct answer

Duty: Performing Coordination Activities. **Duty C**

Task: Keep a log of coordination visits. **Task No. 11**

ACHIEVEMENT INDICATORS The Coordinator:	Yes	No
1. Completed the school information on the Coordination Log.		
2. Filled in the date of each coordination visit on the Coordination Log.		
3. Indicated the place and person visited on the Coordination Log.		
4. Indicated the purpose of the visit on the Coordination Log.		
5. Recorded the number of miles driven on the Coordination Log.		
6. Recorded specific comments that will need to be addresses on the Coordination Log.		
7. Signed and dated the Coordination Log.		
8. Made available a copy of the completed Coordination Log to appropriate school administration as required by the local school district policy.		
9. Maintained Coordination Logs in a permanent location		

Criteria:

Competence in this task will be recognized when the achievement indicators are performed satisfactorily according to the coordinator's supervisor.

Forms Required:
Coordination Log

Resources:
References 18, 24, 58

Critical Items	Items to be Observed or Checked	Rating Yes	No

Product Checklist

Task 215

Type a Letter in Full Block Style

1. Single spaced
2. Center letter horizontally
3. Center letter vertically
4. Began all line at the left margin
5. Types date on line 13-15
6. Typed attention line before salutation
7. Typed Ladies and Gentlemen in attention line.
8. Typed a plural salutation
9. Doublespaced between paragraphs
10. Typed an appropriate complimentary closing
11. Doublespaced before company name
12. Typed company name in all capitals
13. Left three blank lines for handwritten signature
14. Typed reference initials
15. Typed carbon copy notation
16. Typed a mailable letter

TOTAL POINTS EARNED -

POINTS NEEDED FOR MASTERY - 14
TOTAL POINTS POSSIBLE - 16

Example Performance Checklist

Task 110 Task Title: Give Patient Back Rub

ACTIVITY	RATING	
	Acceptable	Unacceptable
1. Washed hands.		
2. Identified patient and explained procedure.		
3. Provide for privacy and adjusted patient's position.		
4. Used good body mechanics		

Example Performance Checklist

Task 175 Task Title: Demonstrate Handwashing Techniques

ACTIVITY	RATING	
	Acceptable	Unacceptable
1. Assembled equipment		
2. Turned on faucet with a paper towel and adjusted water temperature		
3. Wet hands and wrists completely under running water-fingertips were pointed downward.		
4. Applied soap generously.		

J. Avoid the use of "All of the Above" or "None of the Above"

Example:

Poor: What type of propagation is required for plants with corns?

A. Division

B. Grafting

C. Layering

D. None of the above *

Better:

What type of propagation is required for plants with corns?

A. Division

B. Grafting

C. Layering

D. Separation *

Transparency 4-17

Today I learned that written and performance evaluations are:

SESSION 5

Using Student Competency Profiles

Time Required:

One 1/2 to Two Hours

Concepts:

Student competency profiles

Instructional Objectives:

Upon completion of this session participants will be able to:

1. identify uses for student competency profiles (knowledge)
2. explain the nature of the student competency profile for your program (comprehension)
3. use the student competency profile in your program (application)

Background:

A student competency profile is a record-keeping form which is used to keep track of a student's completion of competencies in a vocational program. A student competency profile is often identified, as a student competency record, a student achievement record, a skill record, an employability record, a proficiency evaluation form, or performance record. Regardless of what it is called, it generally has the following components: name of instructor and student, date, units or duty areas, job task or competency statements and a rating scale. One of the important features of a student competency profile is that it does not require a grade but rather a level of achievement.

A student competency profile has several uses:

1. provides students and instructors with a record of student competency achievement
2. assists in the job placement process by helping placement personnel identify proficiencies completed
3. provides information to prospective employers about the person's skill performance
4. serves as an accountability instrument for the student, instructor, and program administrators
5. serves as a public relations tool when presenting information about the program to others
6. used as a reporting system when communicating skills to employers or other schools and/or training programs

A student competency profile is designed to be used with each individual student. It requires that an instructor evaluate a student's performance and indicate on the level of performance on a student competency profile. This evaluation can be:

1. subjective, requiring the instructor to recall student performance over a period of time, such as a grading period or semester and indicate the appropriate level. In this case, the instructor may want to refer to achievement indicators, the job task detailing worksheet, and the criteria for each task for assistance.

2. objective, with the instructor observing the student and checking the performance of each achievement indicator prior to the final decision on the appropriate level

In either of the above situations, the evaluation of student achievement means on the date indicated; the student performed at the level indicated. It does not mean that the student will be able to perform the task at a later date without review or additional practice. It must also be remembered that all tasks in the curriculum are found on the student competency profile. This does not mean that the instructor will teach each task. When completing the record, a student should be certified only for the tasks performed for evaluation.

Materials:

Handouts

* "Session #5 Agenda" Handout #5-1

* "CBE Workshop #4 Formative Evaluations", Handout #5-2

* "Testing", Handout #5-3

* "Student Competency Profile Case Study", Handout #5-4

* "Competency Profiles for each Project EDGE program Areas" (distribute appropriate student competency profile to each participant)

Transparencies

* "A Competency Profile...Also Known As Transparency", Transparency #5-1

* "Uses for Competency Profiles", Transparency #5-2

* "Student Achievement Record", Transparency #5-3

* "I believe that student competency profiles are____", Transparency #5-4

Vocabulary:

student competency profile- a record-keeping form used to track the achievement of competencies by a student in a vocational program area.

Procedures

#1. Allow a few minutes at the beginning of the session for Project EDGE administrators to provide a periodic update on program activities.

#2. Greet the participants and focus on instructional objectives for the session and distribute "Session #5 Agenda". (Handout # 5-1)

#3. As a "warm-up" activity, pass out the "CBE Workshop #4 Formative Evaluations Statements" (Handout #5-2). Have the participants review the statements ("Today, I learned that written an performance evaluations are___") as a review and reinforcement of the concepts covered in Session #4. The facilitator should prepare the summary in the same manner as the sample (Handout 5-2).

#4. Have the participants form three member groups. Randomly assign the members to groups by counting off (1,2,3, etc) based upon the total size of the group. Distribute one "Testing" (Handout #5-3) to each group. As a post-test to Session #4, tell the participants that they have to reach consensus on the answers. Have one person designated, as recorder. Each group must have 13 or more correct (85% proficiency) to master the learning objectives for Session #4. After a short period of time randomly question each group for the answers. Have each group check their answers together.

#5. Introduce the concept of student competency profiles by using information contained in the **Background** section of this session plan. Show the participants that student competency profiles are also called a variety of names. Indicate this fact by presenting Transparency #5-1 in lecture format.

#6. Have the participants working in the same groups of three generate as many uses of student competency profiles, as they can identify in a limited time period. Randomly call on each group to identify and explain one use for student competency profiles. Record the answers on a blank overlay or a newsprint. Continue questioning until each group has had an opportunity to respond and all the uses have been identified. Use appropriate discussion techniques during the process. Display Transparency #5-2 to reinforce each groups responses with the uses stated on the transparency.

#7. Distribute "Student Competency Profile Case Study" (Handout #5-4) to every member of the three member group. Have the participants read and report their reactions to the case study. During the discussion and summary include the following points :

1. When an occupational analysis is conducted the analysis includes the occupation, not the instructional program. Therefore, the competency list should include every one of the tasks identified, as needed by the beginning worker in the occupation.

2. The entire list of competencies are needed for the following reasons:
   a. to show students where they may need additional training.
   b. teachers and administrators can see where the program needs improvements
   c. business an industry need to understand which competencies were covered in the program
   d. the complete list shows where additional resources are needed (equipment, space, business assistance)

3. A complete competency list is needed so that the program is honest with students and honest with employers in the occupation for which the training program is preparing workers.

#8. Distribute to each instructor the student competency profile for their vocational program. Describe major elements (duties, tasks, rating scale, etc.). Ask questions and seek input regarding how the profiles might be used by each member of the Project EDGE team (academic support instructors, counselors, placement staff, and vocational instructors)

#9. Evaluate Session #5 by having each participant complete the statement on "I believe that student competency profiles are_____". (Transparency #5-4)

Events:

1. Provide greeting and session agenda

2. Perform "warm-up" activity for each individual (Session #4 Formative Summaries)

4. Divide into three-member teams for post-test activity/discussion

5. Present information on student competency profiles

6. Use three-member teams for identifying uses/discussion of student competency profiles

7. Perform case study analysis of student competency profiles

8. Conduct discussion of how to use individual student competency profiles

9. Summarize session by reminding participants of written evaluation on testing for Session #5. Tell the participants that they will be discussing formative summaries regarding student competency profiles, reviewing the uses, and identifying teaching/learning strategies for implementing CBE in Session #6.

Evaluation:

Perform a formative process evaluation of the session by showing the statement "I believe that student competency profiles are_____". (Transparency #5-4)

Session 5

Agenda
Faculty In-Service
Date: _____

Performance Goals:

When you have completed this session you should be able to:

1. identify several uses for student competency profiles

2. explain the nature of the student competency profile for your program

Schedule of Activities:

Project EDGE Update	15 minutes
Criterion Reference Measures post-test activity	15 minutes
Discussion of Student Competency Profiles	15 minutes
Student Competency Profile Case Study	15 minutes
Break	
Student Competency Records	40 minutes
Review and Evaluation	10 minutes
Adjournment	

Note to Facilitator: The following includes samples of participant comments from a previous CBE Inservice. It is important to include all participant comments from the current inservice for review and warm-up.

CBE Workshop #4

Formative Evaluations

The following is a list of comments by participants.

Today I learned that written and performance evaluations are:

Necessary
Difficult to create effectively
Still prey to subjective interpretation in many ways
Probably measure memory more than learning and thinking skills
Never taught well-enough to soon-to-be teachers in college

Used for formal evaluation
Criterion referenced for EDGE
Easier to evaluate if the questions are written well for the students' benefit as well as the teacher

Ways to determine competency of the objectives taught

Difficult to write
Can be done if enough effort is given
Are fair and measure as close as possible the skill taught

Are useful tools that need to be developed very carefully so that they are as valid as possible

Are of two types criterion-referenced and norm referenced
Care must be taken in writing performance evaluation Written tests to assure validity, reliability and minimize confusion.

There are plenty of ways to write a poor test.

Are difficult to match to the objectives and other information
Good review of material

Are motivators, diagnostic, a measure for grades
Motivate not only the student but the teacher Good and bad instruments

Are two types of evaluation
Motivate students
Determine how well they are doing
How well things are being taught
Could help the instructor know how, when, where, and why to restructure or redetermine the direction of the class

Are motivators and it is easy to forget this. I have students that look forward to tests!
Most useful was how to make a multiple choice test

Handout 5-3a
(Answers)

Testing

Directions: Please complete the following in your own words.

1. List two types of performance evaluation instruments

   A. Informal instruments

   B. Formal instruments

2. Describe what is meant by a criterion-referenced measure. (CRM)

   A test constructed to yield measurements that are directly interpretable in terms of specified performance standards.

3. What is the difference between a criterion-referenced test and a norm referenced test?

   A Criterion reference test is an individual's performance compared to a criterion and a norm referenced test is when a student's score is compared to the other students taking the test.

4. List at least three instructional purposes for using CRM's.

   A. (1) diagnosis
   B. (2) assessment
   C. (3) evaluation
   (4) motivation
   (5) placement
   (6) prediction

5. List at least three informal evaluation instruments used in vocational programs.

   A. (1) activity sheets
   B. (2) study questions
   C. (3) oral questioning

6. List least three formal evaluation instruments used in vocational programs

   A. (1) written criterion exams
   B. (2) product checklists
   C. (3) performance checklists
   (4) product/performance checklists

Testing

Directions: Please complete the following in your own words.

1. List two types of performance evaluation instruments

   A.----------

   B.----------

2. Describe what is meant by a criterion-referenced measure. (CRM)

   ----

3. What is the difference between a criterion-referenced test and a norm referenced test?

   ----

4. List three instructional purposes for using CRM's.

   A. ----------

   B. ----------

   C. ----------

5. List three informal evaluation instruments used in vocational programs.

   A. ----------

   B. ----------

   C ----------

6. List three formal evaluation instruments used in vocational programs

   A. ----------

   B. ----------

   C. ----------

Handout 5-4

Student Competency Profile

Case Study

Assume that in the Project EDGE program housed at Ypsilanti Adult and Continuing Education Center that you can not possibly teach certain occupational skills because of the lack of specific equipment, laboratory space, low ability levels of the students, or your own lack of knowledge regarding certain skills in the area. Should these competencies still be included in the program's competency list? Why or why not?

Transparency 5-1

A COMPETENCY PROFILE...ALSO KNOWN AS

1. STUDENT COMPETENCY RECORD
2. STUDENT ACHIEVEMENT RECORD (STAR)
3. SKILL RECORD
4. EMPLOYABILITY RECORD
5. PROFICIENCY EVALUATION FORM
6. TRAINING AGREEMFNT RECORD
7. PERFORMANCE RECORD

USES FOR COMPETENCY PROFILES

1. SERVES AS A REPORTING SYSTEM FOR VOCATIONAL PROGRAMS

2. REPRESENTS AN INDIVIDUAL PROFILE OF STUDENT ACHIEVEMENT OF COMPETENCIES

3. ASSISTS IN JOB PLACEMENT PROCESS

4. PROVIDES A PROSPECTIVE EMPLOYER INFORMATION ON COMPLETERS

5. SERVES AS AN ACCOUNTABILITY INSTRUMENT

6. PROVIDES A PUBLIC RELATIONS INSTRUMENT

STUDENT ACHIEVEMENT RECORD

Marketing Education

Student ----------

INSTRUCTIONS:

Mark each student's level of competence according to the following guide:

LEVEL	GUIDE
1	Student has been exposed to task
2	Task accomplished with assistance
3	Task accomplished to criteria by student on their own
4	Ability to teach or demonstrate the task to others

TASK	LEVEL	DATE
A. PERFORMING ADVERTISING ACTIVITIES		
1. Coordinate departmental advertising activities		
2. Describe advertised merchandise to customers		
B. COMMUNICATING INFORMATION		
1. Given verbal presentations.		
2. Demonstrate telephone usage.		
3. Introduce people.		
4. Complete a business form.		
5. Follow oral instructions.		
6. Participate in meetings.		
7. Keep information confidential.		
8. Suggest change to improve work situation.		
9. Distribute store information.		

Transparency 5-4

"I believe that student competency profiles are----------

Session 6

Identifying Learning Styles and Teaching Strategies

Time Required:

One 1/2 to Two Hours

Concepts:

learning activity

Instructional Objectives:

Upon completion of this session participants will be able to:

1. identify effective teaching factors in vocational education (knowledge)
2. identify teaching/learning activities to implement CBVE in your program (knowledge)
3. use appropriate teaching/learning activities in your program (application)

Background:

A basic concept of competency based education is to provide instruction and learning activities to meet the needs of each individual student. To select the appropriate learning activity for a student an instructor should be familiar with 1) the student's background, 2) the student's attitudes toward the course and the instructor, 3) the student's needs and concerns, and 4) the student's preferred learning style. Based upon individual learner characteristics and an instructor's teaching strengths, abilities, and interests an appropriate learning activity can be selected for the student. A learning activity is an experience that an instructor plans for one or more students so that they will be able to demonstrate and perform a given job task or competency at a pre-determined level of proficiency. The selection of learning activities to use are dependent upon the following :

1. teaching methods
2. instructional materials
3. instructional media

When choosing a teaching method, appropriate instructional materials or media an instructor should evaluate whether the method, materials, or media selected will be effective in teaching a particular task. In selecting the most appropriate teaching method, material or media the instructor should use the following evaluative criteria:

1. Will the teaching method, instructional material, or media lead to the achievement of the identified competency?

2. Is there another teaching method, instructional material, or media that would work better?

3. Can the selected teaching method, instructional material, or media work in the particular setting of the laboratory, with the equipment available, and with the general conditions present in the classroom?

4. Is there enough time available both in the laboratory and outside the laboratory to adequately prepare and use the teaching method, instructional material, or media?

5. Is there another individual (former student, student peer, aide, paraprofessional, or outside resource person) who could assist with the learning activity?

It is important to remember that there is no single teaching method, instructional material, or media that will work with all students. An effective instructor attempts to use a variety of teaching methods, instructional materials and media to meet the diverse and different needs of all individuals enrolled in the program. The identification of each student's preferred learning style can be a guide to determining the best learning activity to use with a particular student.

Materials:

Handouts

* "Session #6 Agenda", Handout #6-1

* "CBE Workshop #5 Formative Evaluations", Handout #6-2

* "Brainwriting", Handout #6-3

* "Effective Teaching in Vocational Education" (ERIC Practice Application Brief) Handout #6-4

* "Types of Teaching Methods and Materials", Handout #6-5

* "Learning Activity Problem", Handout #6-6

* "Suggested Learning Activities", Handout #6-7

Transparencies

* "Uses for Competency Profiles", Transparency #6-1

* "Types of Teaching Methods and Materials", Transparency #6-2

* "Types of Audio-Visual Aids", Transparency #6-3

* "Reasons for Using Audio-Visual Materials", Transparency #6-4

* "My favorite learning activity is _____because _____", Transparency #6-5

Vocabulary:

learning activity -an experience in that an instructor plans for one or more students so that they may be able to demonstrate a pre-determined level of performance on a specified task

Procedures

#1. Allow a few minutes at the beginning of the session for Project EDGE administrators to provide a periodic update on program activities.

#2. Greet the participants and focus on instructional objectives for the Session and distribute "Session #6 Agenda". (Handout #6-1)

#3. As a "warm-up" activity, pass out the "CBE Workshop #5 Formative Evaluation Statements" (Handout #6-2). Have the participants review the statements ("I believe that student competency profiles are_____") as a review and reinforcement of the concepts covered in Session #5.

#4. Distribute the "Brainwriting", (Handout #6-3) and inform the participants that this exercise will be used as a "post-test" to determine their knowledge on the uses of student competency profiles. To achieve mastery they must be able to identify at least 5 uses of student competency profiles. Instruct the participants to use one box on the "Brainwriting" handout for each identified use. Discuss as a group the uses of student competency profiles identified by individual members. "Hitch-hike" on individual ideas by using "Uses for Competency Profiles", (Transparency #6-1).

#5. Distribute the "Effective Teaching in Vocational Education ", (Handout # 6-4) to each participant. Review together the main factors involved with effective teaching. Pay particular attention to the factors identified by Owens and Crohn (1983) and Newcomb, McCracken and Warmbrod (1986). Stress the importance of practice in improving instruction (guided practice, independent practice, massed and distributed practice). Guided practice is teacher directed instruction on a particular task. The instructor explains each step in the performance of a task while the student observes, follows, and notes the steps in the process. Independent practice is student directed and done individually, (i.e. a demonstration, simulation, an instructional handout, assignment or other practice activity), as reinforcement to teacher guided practice. Massed practice is practice that occurs repeatly until the task is mastered. (i.e. typing for speed and accuracy). Distributed practice is practice that is interspersed with instruction over time to reinforce and review a previously learned task. If available use the video-tape available from IOX Productions entitled "Improving Instruction: The Role of Practice" 5420 McConnell Avenue Los Angeles, CA 90066-7028 (213) 822-3275. If unavailable, have participants give examples of each type of practice and examples of how they use practice in their vocational education programs.

#6. Introduce the concept of teaching/learning strategies by using information contained in the **Background** section of this Session plan. Discuss with participants the variety of teaching methods, materials and media that are available for use in vocational education programs. Indicate the many types of teaching methods, materials, and audio-visual aids that are available by using "Types of Teaching Methods and Materials", (Transparency #6-2); "Types of Audio-Visual Materials", (Transparency #6-3); and "Reasons for Using Audio-Visual Materials", (Transparency #6-4). Have participants identify examples of when they have used the different learning strategies and audio-visual materials effectively in the classroom.

#7. Distribute the "Types of Teaching Methods and Materials (Handout #6-5)' to each participant along with the "Learning Activity Problem" (Handout #6-6.) Read the problem aloud and answer any questions that the participants may have regarding the problem. After a brief period of time select a few examples to read to the group. If time permits, distribute and have the participants complete the "Suggested Learning Activities" (Handout #6-7)

#8. Summarize Session #6 by indicating that the discussion of suggested learning activities and the individual case problems will be shared with the entire group at the next session.

#9. Evaluate Session #6 by having each participant complete the statement on "My favorite learning activity is ____ because _____". Transparency #6-5

Events:

1. Project EDGE Update

2. Provide greeting, Session agenda and overview

3. Perform "warm-up" activity for each individual (Session #5 Summaries)

4. Perform "Brainwriting" exercise as a review and post test on student competency profiles

5. Present information on effective teaching in vocational education

6. Present information on teaching methods, materials, and media

7. Develop an average and below average student case problems

8. Summarize Session by encouraging participants to identify appropriate learning activities for their average and below average students identified above. Tell the participants that we will review effective teaching factors, explore the identification of learning styles and continue to discuss the identification of appropriate teaching/learning activities for implementing CBVE in Session #7.

Evaluation:

Perform a formative process evaluation of the Session by having the participants respond to the following statement, "My favorite learning activity is _____ _____ because_____".

Session 6

Agenda
Faculty In-Service
Date:_____

Performance Goals:

When you have completed this session you should be able to:

1. identify effective teaching factors in vocational education
2. identify teaching/learning strategies to implement CBVE in your program

Schedule of Activities:

Project EDGE Update	15 minutes
Brainwriting Exercise/Review	15 minutes
Effective Teaching Factors in Vocational Education	30 minutes
Break	
Teaching Methods/Visual Aids	10 minutes
Learning Activity Problem-solving	40 minutes
Evaluation	
Adjournment	

Summative Evaluation of CBE Workshop V

In response to the question:

I believe student competency profiles are good because:

It lets students know what's expected of them
Keeps students/ teachers focused
Can help teacher with record keeping tasks especially since students can come back next semester
Can be used by the employer to understand our program
Use them for public relations with area employers can promote and present our student programs to employers.
Provides a consistent record keeping among the staff
Easy for an administrator/ other teacher to read and follow through.

A way to express what a person has been able to do at a certain date and time.
They do not positively show who is or will be good workers They should show the basic skills and not necessarily be extremely detailed.

Necessary to keep students, instructors and employers informed of student competency and progress.
They are a way of seeing what a student has learned/ accomplished.

We don't know if the program will last
Competency based education is not philosophically consistent
A teacher can not teach at her best with open entry/open exit.
A school system is not responsible for students who fail, for students who have enormous personal problems and can not attend concentrate on learning for students who can't attend regularly due to G.A. being cut, etc.
It has no through philosophy for (or accounting for) the process of learning as well as the accounting for competencies.
Being uncertain of future we don't know the future for the profiles.

A record of skills to which the student has been exposed.
It in proficiency (at a amateur level) of 85% at some point in time.

Student competency profile are the first step in an attempt to define skill achievement for a potential employer.

I believe that student competency profiles are good instruments for giving direction for the content of the course.
For informing students about course content and what will be expected of them.
For relating course work to job possibilities.
For checking student achievement
Keeping records of achievement
Informing potential employers about client competencies

Are valuable to the student
Should be written in a language easily understood by the student and anyone else who reads them.
Should have input from area business people

Deceiving
Provide false sense of security if the employer is merely looking at competencies met
Don't measure ability or degree of competency ...only competency
A necessary tool if interpreted with other information that might indicate the effectiveness of any employee

Valuable for entry level positions only.
It is a good measuring device for exposure or mastery of skills and tasks.

Sample Summative Evaluations From a Previous CBF Workshop V

In response to the question:

I believe student competency profiles are good because:

It lets students know what's expected of them
Keeps students/ teachers focused
Can help teacher with record keeping tasks especially since students can come back next semester
Can be used by the employer to understand our program
Use them for public relations with area employers can promote and present our student programs to employers.
Provides a consistent record keeping among the staff
Easy for an administrator/ other teacher to read and follow through.

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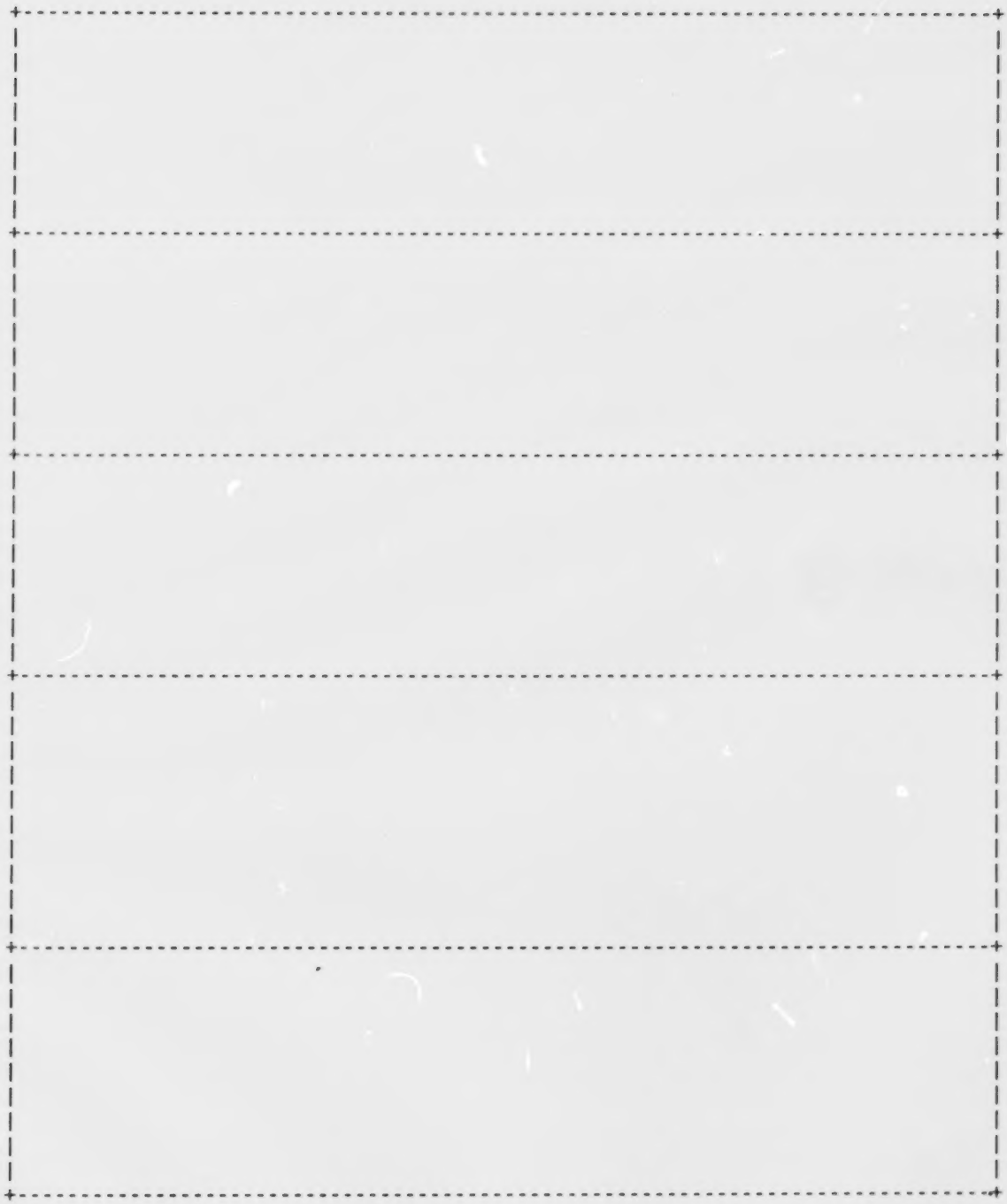
BRAIN WRITING



Types of Teaching Methods: Materials

A. Teaching Methods and Materials in which the teacher primarily directs the learning activity.

1. Chalkboard Techniques
2. Demonstration (teacher)
3. Evaluation
4. Lecture
5. Pupil-Teacher Planning
6. Questioning
7. Use of Community Resources
8. Use of Textbook Materials
9. Visual Aids: Charts, Graphs, video tapes

B. Group Discussion Methods

1. Brainstorming
2. Committee Work
3. Debates
4. Dialogue
5. Informal Discussion
6. Oral reports
7. Panel
8. Parliamentary Procedures
9. Role-Playing
10. Symposium

C. Group Learning Methods

1. Case Studies
2. Class Problems
3. Club Work
4. Contests
5. Demonstrations
6. Displays and Exhibits
7. Experiments
8. Fashion Shows
9. Field Trips
10. Role Playing
11. Resource Persons
12. Questionnaires/Surveys

D. Individual Learning Methods

1. Computer Assisted Instruction
2. Demonstration Student
3. Evaluation
4. Individual Counsel
5. Learning Activity
6. Interviews to get information
7. Practice and Drill
8. Ratings of Many Types
9. Reference Reading
10. Research Inquiry
11. Programmed Instruction
12. Structured Observation
13. Workbooks
14. Work-Site Based Experiences

Learning Activity

Problem Study

Problem: In the space provided below you are to identify two types of students (one average and one below average) and their characteristics. Your description for each student must include the following: 1) background information 2) student's attitudes and interest in your program. 3) student's attitudes towards you, (the instructor), 4) student's concerns and 5) student's preferred method of learning. Do not use real names.

Average Student ----------

Below Average ----------

Suggested Learning Activities

Directions: Based upon the student characteristics, your strengths and interests, you are select a competency from your program area and to choose two learning activities for each type of student using the space below. We are defining a Learning Activity as an experience in which an instructor plans for one or more students so that they may be able to demonstrate a pre-determined level of performance on a specified task. Learning activities are dependent upon:

1. teaching method
2. instructional materials
3. instructional media

Competency (performance objective)----------

Learning Activities for the Average Student

1. ----------

2. ----------

Rationale:----------

Learning Activities for the Below Average Student

1.----------

2.----------

Rationale:----------

USES FOR COMPETENCY PROFILES

1. SERVES AS A REPORTING SYSTEM FOR VOCATIONAL PROGRAMS
2. REPRESENTS AN INDIVIDUAL PROFILE OF STUDENT ACHIEVEMENT OF COMPETENCIES
3. ASSISTS IN JOB PLACEMENT PROCESS
4. PROVIDES A PROSPECTIVE EMPLOYER INFORMATION ON COMPLETERS
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Types of Teaching Methods: Materials

A. Teaching Methods and Materials in which the teacher primarily directs the learning activity.

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4. Individual Counsel
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7. Practice and Drill
8. Ratings of Many Types
9. Reference Reading
10. Research Inquiry
11. Programmed Instruction
12. Structured Observation
13. Workbooks
14. Work-Site Based Experiences

Transparency # 6-3

Types of Audio Visual Materials

All learning comes from the use of the various senses - - seeing, hearing, feeling, tasting, and smelling. Learning is a mental process aided by all of our senses. Audio-visual aids are, therefore, desirable as teaching tools because they appeal to a number of these, particularly, seeing and hearing. The following steps are involved in the effective use of audio-visual aids:

1. Planning by the instructor.
2. Selecting the most appropriate audio-visual aid.
3. Preparing the equipment for use.
4. Introducing the information to students.
5. Discussing the information presented.
6. Summarizing the information presented.

The principle audio visual aids available for classroom use are the following:

- Bulletin Boards
- Chalkboard
- Charts & Graphs
- Computers
- Displays/Exhibits
- Filmstrip Projector
- Flannel Boards
- Flash Cards
- Flip Chart
- Instructional Sheets
- Models
- Opaque Projector
- Overhead Projector
- Projector 16mm
- Radio
- Record Player
- Slide Projector
- Tape Recorder
- Television
  - Instructional
  - Educational
- Video Tapes

Using Audio-Visual Material

Reasons for:

>> Assists instructor in presenting skill requirements of a job.

>> Reinforces concepts presented in classroom, laboratory or demonstration.

>> Provides a vehicle for remediation.

>> Provides multi-sensory learning experiences.

>> Adds to believability of message.

>> Adds variety to the instructional program.

>> Provides a simulated learning experiences.

Types of Teaching Methods: Materials

A. Teaching Methods and Materials in which the teacher primarily directs the learning activity.

1. Chalkboard Techniques
2. Demonstration (teacher)
3. Evaluation
4. Lecture
5. Pupil-Teacher Planning
6. Questioning
7. Use of Community Resources
8. Use of Textbook Materials
9. Visual Aids: Charts, Graphs, video tapes

B. Group Discussion Methods

1. Brainstorming
2. Committee Work
3. Debates
4. Dialogue
10. Symposium
6. Oral reports
7. Panel
8. Parliamentary Procedures
9. Role-Playing 5. Informal Discussion

C. Group Learning Methods

1. Case Studies
2. Class Problems
3. Club Work
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7. Practice and Drill
8. Ratings of Many Types
9. Reference Reading
10. Research Inquiry
11. Programed Instruction
12. Structured Observation
13. Workbooks
14. Work-Site Based Experiences

Session #7

Identifying Learning Styles and Teaching Strategies

Time Required:

One 1/2 to Two Hours

Concepts:

learning activity
learning style

Instructional Objectives:

Upon completion of this session participants will be able to:

1. identify an individual student's learning style (knowledge)

2. use teaching/learning strategies to implement CBVE in a vocational program (application)

Background:

A basic concept of competency based education is to provide instruction and learning activities to meet the needs of each individual student. One of the keys to effective instruction is to identify an individual's strengths, abilities, and preferred method of learning or learning style.

There are several ways to identify a student's learning style. One of the easiest ways is to simply informally observe an individual student. As different learning activities are implemented, the instructor's observation as to how well an individual responds to the activity can provide a wealth of information about a student's preferred method of learning. Consulting with other instructors can be another valuable source of information. A standardized assessment is a more formalized method of obtaining information about learning style.

During this session we will be using a formalized Learning Styles Instrument. The CITE Learning Style Instrument as referenced in the Office Administration Teacher's Guide prepared by Jan Patton and published by the Occupational Curriculum Laboratory at East Texas State University (1989). It is used by teachers for determining the preferred learning style of their students. The Instrument is divided into three main areas: information gathering/receiving, social work conditions, and expressive preference.

The CITE Learning Style instrument investigates the following areas of information gathering/receiving:

1. Auditory Language: The way a student hears words, and processes spoken words.

2. Visual Language: The way a student sees words and processes written language.

3. Auditory Numerical: The way a student hears numbers and processes numerical values.

4. Auditory-Visual-Kinesthetic: The way a student learns by doing. Usually this preferred learning style is accompanied by auditory stimuli, visual stimuli, or some combination of both.

The area of working conditions considers whether the student likes to work alone, in a group, or both. The areas are titled:

1. Group learner: A student who likes to work with at least one other person when there is important work to be done.

2. Individual learner: A student who works and thinks best when working alone. This type of student is a usually a self-starter and often finds working with others to be distracting.

The area of individual expressiveness is divided into two areas:

1. Oral expressive: A student who prefers to say what he/she knows. Usually answers or explains answers orally.

2. Written expressive: A student who prefers to write answers or explanations.

To select the appropriate learning activity for a student an instructor should be familiar with 1) the student's background, 2) the student's attitudes toward the course and the instructor , 3) the student's needs and concerns, and 4) the student's preferred learning style.

Based upon individual learner characteristics and an instructor's teaching strengths, abilities, and interests an appropriate learning activity can be selected for the student. An learning activity is an experience in which an instructor plans for one or more students so that they will be able to demonstrate and perform a given job task or competency at a pre-determined level of proficiency. The selection of the appropriate learning activities to use are dependent upon the following :

1. teaching methods used by the instructor
2. instructional materials available to the instructor
3. instructional media available to the instructor

Materials:

Handouts

* "Session #7 Agenda", Handout #7-1

* "CBE Workshop #6 Formative Evaluations", Handout #7-2

* "Post test for Session #6", Handout #7-3

* "Learning Style Instrument", Handout #7-4

* "Learning Styles Answer Sheet", Handout #7-5

* "Learning Styles Worksheet", Handout #7-6

* "Major Learning Styles", Handout #7-7

* "Learning Activity Cases", Handout #7-8

* "Suggested Learning Activities", Handout #7-9

Transparencies

* "Teachers should always _____because _____
_____", Transparency #7-1

Vocabulary:

learning activity- an experience in which an instructor plans for one or more students so that they may be able to demonstrate a pre-determined level of performance on a specified task

learning style- the most efficient, effective or preferred method of learning for an individual student i.e. auditory, visual, kinesthetic, etc.

Procedures

#1. Allow a few minutes at the beginning of the session for Project EDGE administrators to provide a periodic update on program activities.

#2. Greet the participants and focus on instructional objectives for the session and distribute "Session #7 Agenda". (Handout #7-1)

#3. As a "warm-up" activity, pass out the "CBE Workshop #6 Formative Evaluation Statements" (Handout #7-2). Have the participants review the statements ("I like_____as a learning activity because_____") assembled for this session by the facilitator as a review and reinforcement of the concepts covered in Session #6.

#4. Distribute the "Post test on Session #6", (Handout #7-3) and inform the participants that this exercise will be used as a "post-test" to determine their knowledge on the major factors behind effective teaching in vocational education and types of learning activities. To achieve mastery they must be able to identify at least 24 of the 30 responses correctly. After completion of the post-test instruct the participants to self-check their answers. Discuss as a group the answers to the post-test.

#5. Introduce the concept of learning styles by using information contained in the Background section of this session plan. Discuss with participants the three areas of learning identified through the CITE Learning Style Instrument (information gathering/receiving, social working conditions, and individual expressiveness).

#6. Distribute the "Learning Styles Instrument", (Handout #7-4) and the "Learning Styles Answer Sheet", (Handout #7-5) to each participant. Instruct the participants that the instrument can be administered to as many as 30-35 students in approximately 20 minutes. Directions should be clear that there are no right or wrong answers, they are to give only one answer to each statement. To account for the non-readers in a class or those individuals who prefer auditory responses to visual stimuli the instructor should read each statement aloud and allow about 12 seconds to respond between statements. Instructors should discourage students from changing their answers by telling them that their first choice is usually the best response.

#7. Distribute the "Learning Style Worksheet" (Handout #7-6). Instruct participants about scoring procedure and have them calculate there score in each of the nine areas. If a score is between 33 and 40, the style is considered to be a major learning style for a student. From 20-32 the style is a minor learning style and below 20 indicates that this style of learning is used to a negligible extent. Style usage is defined as follows :

1. Major: The student prefers this mode of learning, feels comfortable with it, and uses it for important (for the student) learning. Each student does not necessarily have one and only one preferred style.

2. Minor: The student uses this mode but usually as a second choice, or in conjunction with other learning styles.

3. Negligible: The student prefers not to use this mode of learning if other choices are available.

To emphasize the learning style differences and suggested learning activities for students who have a major learning style preferences distribute the "Major Learning Styles" (Handout #7-7) . Stress to participants that the nine style areas identified on the handout are described as if a student were a major in that particular style of learning.

#8. Distribute the "Learning Activity Cases", (Handout #7-8) to each participant. Divide the participants into three member teams and distribute the "Suggested Learning Activities" (Handout #7-9) to each team. If time permits have each team discuss two cases (one average and one below average student) randomly assigned by the facilitator for the session. Have each team collectively discuss the suggested learning activities to use with the rationale for using those particular learning activities. Select a reporter to give the group's responses as the facilitator details the responses on an overlay, posterboard, newsprint or the chalkboard. Elicit additional responses from the total group regarding each individual case.

#9. Summarize Session #7 by reminding the participants of the basic concept of competency based education, which is to provide instruction and learning activities to meet the needs of each individual student. One of the keys to effective instruction is to identify an individual's strengths, abilities, and preferred method of learning or learning style.

#10. Evaluate Session #7 by having each participant complete the statement on "Teachers should always_____ because _____" . Transparency #7-1

Events:

1. Project EDGE Update.

2. Provide greeting, session agenda and overview.

3. Perform "warm-up" activity for each individual (Session #6 Summaries).

4. Perform "Post-test" exercise as a review and post test on effective instruction in vocational education.

5. Present information on learning styles contained in Background section.

6. Assess participant learning styles by using CITE Instrument.

7. Discuss results of learning style assessment.

8. Perform a cooperative learning activity to select appropriate learning activities for the average and below average students identified in the learning activity case handout. Tell the participants that we will review effective learning styles, techniques for orienting students to CBVE, and student record-keeping in Session #8.

Evaluation:

Perform a formative evaluation of the session by having the participants respond to the following statement, "Teachers should always_____ because_____" (Transparency #7-1).

Session #7
Agenda
Faculty In-Service
Date:_____

Performance Goals:

When you have completed this session you should be able to:

1. list effective teaching factors in vocational education
2. identify an individual student's learning style
3. select teaching/learning strategies to implement CBVE in your program

Schedule of Activities:

Project EDGE Update	15 minutes
Effective Teaching Factors in Vocational Education Review	15 minutes
Identifying Learning Styles	30 minutes
Break	
Selecting Teaching/Learning Strategies	40 minutes
Evaluation	10 minutes
Adjournment	

CBE Workshop #6 Formative Evaluations

Sample Participant Responses from a Previous Session VI

The participants filled in the blank, to the following statement.

I like:_____as a learning activity because it:_____

I like: writing poetry, as a learning activity because it: allows for free, spontaneous expression of ideas, thoughts and emotions that help students learn more about themselves which will helps them learn more.

I like: role playing, as a learning activity because it: involves students and gets them to start thinking for another person's point of view.

I like: sharing experiences, as a learning activity because: we learn from peers too.

I like: lectures, as a learning activity because: I feel that it's nice to hear from someone who knows a great deal about a subject.

I like: reading followed by questions and answers, as a learning activity because: I like reading and testing myself.

I like: textbook, demonstration, practice and drills as learning activities because: I must see something modeled. I must practice over and over to learn anything. I have great difficulty making the connection between words and actions.

I like: interpersonal and kinesthetics: as learning activities because: they provide social development and people skills as well as interaction and role playing (action).

I like: brainstorming: as a learning activity because: it takes a little preparation time and involves all students. In addition it is nonjudgemental and nonevaluative, thus allowing students to come up with a variety of ideas. I also like review, after brain storming, going through the ideas generated and thinking of ways to implement them.

Post-test for Session #7

Evaluation Criteria: 24 points out of a possible 30 points

1. Research has shown that there are several factors that lead to effective teaching in Vocational Education. Identify at 1 east 4 of these factors.

_____ _____ _____

_____ _____ _____

2. What is the difference between guided practice and independent practice?_____

_____

3. What is the difference between massed practice and distributed practice?_____

_____

4. Identify at least 4 teaching methods which are primarily teacher-directed.

_____ _____ _____

_____ _____ _____

5. Identify at least 4 group learning methods.

_____ _____ _____

_____ _____ _____

6. Identify at least 4 individual learning methods.

_____ _____ _____

_____ _____ _____

7. Identify 4 reasons for using audio-visual materials.

_____ _____

_____ _____

Post-test for Session #7

Evaluation Criteria: 24 points out of a possible 30 points

1. Research has shown that there are several factors that lead to effective teaching in Vocational Education. Identify at least 4 of these factors.

time on task	student motivation	effective learning climate
performance expectations	cooperative learning	use of regular evaluation

2. What is the difference between guided practice and independent practice?

guided practice is teacher led practice, while independent practice is student led practice.

3. What is the difference between massed practice and distributed practice?

Massed practice - repeated practice over time.

Distributed practice - occurs intermittently over the course of the instruction.

4. Identify at least 4 teaching methods which are primarily teacher-directed.

Demonstration	Chalkboard	Textbooks
Lecture	Visual Aids	Community Resources

5. Identify at least 4 group learning methods.

Role-playing	Experiments	Case studies
Demonstrations	Filed Trips	Committees

6. Identify at least 4 individual learning methods.

Independent Study	Reading	Research
Observation	Informational interviews	Practice/Drill

7. Identify 4 reasons for using audio-visual materials.

Interest	Believability of message
Retention is Greater	Fun and Interesting

LEARNING STYLE

INSTRUCTIONS: Place all answers on the answer sheet. Circle the number which agrees with how you feel about the statement. A 4 indicates you agree that the statement is most like you and a 1 indicates that the statement is least like you.

1. When I make things for my studies, I remember what I have learned better.
2. Written assignments are easy for me to do.
3. I learn better if someone read a book to me than if I read silently to myself.
4. I learn best when I study alone.
5. Having assignment directions written on the board makes them easier to understand.
6. It's harder for me to do a written assignment than an oral one.
7. When I do math problems in my head, I say the numbers to myself.
8. If I need help in the subject, I will ask a classmate for help.
9. I understand a math problem that is written down better than one I hear.
10. I don't mind doing written assignments.
11. I remember things I hear better than I read.
12. I remember more of what i learn if i learn it when I am alone .
13. I would rather read a story than listen to it read.
14. I feel like I talk smarter than I write.
15. If someone tells me three numbers to add I can usually get the right answer without writing them down.
16. I like to work in a group because I learn from the others in my group.
17. Written math problems are easier for me to do than oral ones.
18. Writing a spelling word several times helps me remember it better.
19. I find it easier to remember what i have heard than what I have read.
20. It is more fun to learn with classmates at first, but it is hard to study with them.
21. I like written directions better than spoken ones.
22. If homework were oral, I would do it all.

23. When I hear a phone number, I can remember it without writing it down.

24. I get more work done when I work with someone.

25. Seeing a number makes more sense to me than hearing a number.

26. I like to do things like simple repairs or crafts with my hands.

27. I study best when no one is around to talk or listen to.

29. I would rather read things in a book than have the teacher tell me about them.

30. Speaking is a better way than writing if you want someone to understand what your really mean.

31. When I have a written math problem to do, I say it to myself to understand it better.

32. I can learn more about a subject if I am with a small group o f students.

33. Seeing the price of something written down is easier for me t o understand than having someone tell me that price.

34. I like to make things with my hands.

35. I like tests that call for sentence completion or written answers.

36. I understand more from a class discussion, than from reading about a subject.

37. Spelling and grammar rules make it hard for me to say what I want to in writing.

38. It makes it easier when I say the numbers of a problem to myself as I work it out.

39. I like to study with other people.

40. When the teachers says a number, I really don't understand it until I see it written down.

41. I understand what i have learned better when I am involved in making something for the subject.

42. Sometimes I say dumb things, but writing gives me time to correct myself.

43. I do well on tests if they are about things I hear in class.

44. I can't think as well when I work with someone else as when I work alone.

45. I don't mind completing a classroom/laboratory project by myself.

LEARNING STYLE ANSWER SHEET

NAME: **DATE:** **GRADE:**

Circle the number which agree with how you feel about the statement. A 4 indicates you agree that the statement is most like you and a 1 indicates that the statement is least like you.

	LEAST LIKE ME			MOST LIKE ME
1.	1	2	3	4
2.	1	2	3	4
3.	1	2	3	4
4.	1	2	3	4
5.	1	2	3	4
6.	1	2	3	4
7.	1	2	3	4
8.	1	2	3	4
9.	1	2	3	4
10.	1	2	3	4
11.	1	2	3	4
12.	1	2	3	4
13.	1	2	3	4
14.	1	2	3	4
15.	1	2	3	4
16.	1	2	3	4
17.	1	2	3	4
18.	1	2	3	4
19.	1	2	3	4
20.	1	2	3	4
21.	1	2	3	4
22.	1	2	3	4

	LEAST LIKE ME			MOST LIKE ME
23.	1	2	3	4
24.	1	2	3	4
25.	1	2	3	4
26.	1	2	3	4
27.	1	2	3	4
29.	1	2	3	4
30.	1	2	3	4
31.	1	2	3	4
32.	1	2	3	4
33.	1	2	3	4
34.	1	2	3	4
35.	1	2	3	4
36.	1	2	3	4
37.	1	2	3	4
38.	1	2	3	4
39.	1	2	3	4
40.	1	2	3	4
41.	1	2	3	4
42.	1	2	3	4
43.	1	2	3	4
44.	1	2	3	4
45.	1	2	3	4

LEARNING STYLES WORKSHEET

VISUAL LANGUAGE

5

13

21

29

37

Total___x2=___ (Score)

VISUAL NUMERICAL

9

17

25

33

41

Total___x2=___(Score)

AUDITORY LANGUAGE

3

11

19

36

44

Total___x2=___(Score)

AUDITORY NUMERICAL

7

15

23

31

39

Total___x2=___(Score)

KINESTHETIC-TACTILE

1

18

26

34

42

Total___x2=___(Score)

SOCIAL INDIVIDUAL

4

12

20

28

45

Total___x2=___(Score)

SOCIAL GROUP

8

16

24

32

40

Total___x2=___(Score)

EXPRESSIVE-ORAL

6

14

22

30

38

Total___x2=___(Score)

EXPRESSIVE-WRITTEN

2

10

27

35

43

Total___x2=___(Score)

33-40 Major Learning Style

20-32 Minor Learning Style

20 Negligible

Major Learning Style Areas

1. Auditory Language: This students learns best from hearing spoken words. You may see this student vocalizing or see the student's lips or throat moving while reading, particularly when striving to understand material. This student is more capable of understanding and remembering words or facts if the facts are only learned by hearing.

2. Visual Language: This student learns well from seeing words in books, on a chalkboard or charts in a workbook. This type of student may even write down words that are given orally, in order to learn them by seeing them on paper. This student remembers and uses information better if the information is read.

3. Auditory Numerical: This students learns from hearing numbers and oral explanations. This student may remember phone and locker numbers with ease, and is successful with oral numbers, games, and puzzles. This type of student may do just about as well without a math book, because written materials are not as important. This student probably can work math problems in his/her head. You may see this type of student saying numbers or see the lips moving when reading a problem.

4. Visual Numerical: This student has to see numbers on the board, in a book, or on a paper in order to work with them. This type of student is more likely to remember and understand math facts if the numbers are seen. This student does not seem to need much oral explanation.

5. Auditory-Visual-Kinesthetic (AVK): The AVK student learns best by experience--doing and self-involvement. This type of student needs a combination of stimuli. The manipulation of material along with accompany sight and sounds (words and numbers seen and spoken) will make a difference. This student may not seem to be able to understand, or be able to keep the mind occupied unless totally involved. This student seeks to handle, touch, and work with what is being learned. Sometimes writing or a symbolic wiggling of the fingers is a symptom of the AVK.

6. Individual Learner: This student gets more work done alone. This type of student thinks best and remembers more when learning is done independently. This student cares more for their own opinions that for the ideas of others. This student does not over-socialize during instruction or in a classroom situation.

7. Group Learner: This student strives to study with at least one other student, and does not get much done alone. This type of student values other's opinions and preferences. Group interaction increases learning and recognition of facts. This type of student likes to socialize in classroom situations.

8. Oral Expressive: This student can easily tell you what is known. This student talks fluently, comfortably, and is outspoken. This type of student probably knows more than the tests scores indicate. This student is not shy about giving reports or talking to the instructor or other students. Muscular coordination involved with writing may be difficult for this student . Organizing and putting thoughts on paper may be too slow and tedious for this student.

9. Written Expressive: This student can write essays and good answers on tests to show what has been learned. This student is less comfortable, when an oral answer is required. This student's thoughts are better organized on paper than when given orally.

Learning Activity Cases

Learning Activity Problem Study

Problem: In the space provided below you are to identify two types of students (one average and one below average) and their characteristics. Your description for each student must include the following: 1) background information, 2) student's attitudes and interest in your program, 3) student's attitudes toward you (the instructor), 4) student's needs and concerns and 5) student's preferred method of learning. Do not use real names.

Average Student:

Single parent father, 25-35 years old, one son, good academic foundation before coming into the program, hyper conscientious about his success in the program, highly interested and self motivated, good positive attitude about present and future goals, likes me both personally and professionally, willing to share information on a formal and informal basis, concerns are basic to his being a good person and a good father, wants to change his life around, interpersonal and linguistic

Average Student:

Employed part-time, at least has some employment success, wants more job skills, goal orientated, willing to share personal information while leaning. Able to manage love life and concentrate on acquiring new skills, individualized instruction balanced with independent practice time.

Below Average:

Few successful employment experiences, unsure of goals, afraid of employment (views it as authority figure, negatively), doesn't interact well - needs encouragement, quiet, angered by home life and demands of others (i.e. children), desires oral instruction - avoids written material because it requires effort.

Average Student:

L is an average adult basic education (ABE) student (meaning that she has potential in, with time and energy, to go on to high school completer (HSC). She is a single mother of two children, she gets along with me and most other students in the class. She becomes irritated with others that cause a disturbance in the class. L was labeled in high school as "his sister" and was expected by teachers to behave as did her unruly brother. She felt unable to break away from the family tradition in the small school system. She learned best by working alone with guided practice followed by massed practice. She needs much phonetic and other word attachment skills and needs to be aware of what skill is being learned.

Below Average:

R is below average student, unhappily married to a man who is not the father of her children and is twice her age. R is involved with the program to get away from home, to forget about the rest of life. She has many criticisms regarding school, herself and school. She wants to be a good friend of the teacher. Her reading ability is good but needs work on comprehension. Concerned with failure and success. Student finds it hard to sit still for any period of time, needs to leave room. Very few friends but wants a deep meaningful relationship with people. Somewhat withdrawn. Likes to write poems in her diary.

Average Student:

Sally is a single mother 23 years old, high school drop out. Has held only 2 jobs, has worked for 1 month maximum. Is interested in the program and attends well. She likes me and answers questions with without being, prompted or called upon. She wants to move out of parents home and support herself - have a future she creates. Her learning style is interpersonal.

Below Average:

Sally is single mother, one child, married at 14, she likes the class, however her attendance is poor. She likes me and the class, has given me a coffee cup and brings articles of food for the class. I don't ever know about her needs and concerns. She is interpersonal, logical and kinesthetic. She likes to talk, work on the computer and to "do stuff."

Average Student:

Abby is a single mother with two preschool children, late 30's in age, children the result of long term relationship. Has worked for telephone, company and for airline company. Children have medical problems. She was at first resentful, for being "required" to come to school. She now sees the program as a method to upgrade. Her attitude at first, wary now is cordial. Needs to get a good paying job.

Below Average:

Betsy is a single mother with one child, not interested very impatient, definitely not linguistic.

Average Student:

Betty Smith is an ADC mother of two. She wants very much to realize her goals. She would like to remove herself and children from the projects and seek permanent employment. Her attitude towards me is cooperative, respectful and friendly. Methods of learning I have found successful with Betty are spatial (any drawing activity) and interpersonal. Large group activities seem to much for her to handle (becomes paranoid).

Average Student:

Single parent, 25-30 years of age, interested, ready to work and enjoys the class, playful attitude, joking demeanor.

Below average:

Adult recovering alcoholic, single parent, highly motivated to learn, works well with me seeks my advice and assistance when needed open communication , concerned that they have a lot of catching up (to others), feels dumb at times, interpersonal learning style.

Suggested Learning Activities

Directions: Based upon the student characteristics, your strengths and interests, you are select a competency from your program area and to choose two learning activities for each type of student using the space below. We are defining a **Learning Activity** as an experience in which an instructor plans for one or more students so that they may able to demonstrate a pre-determined level of performance on a specified task. Learning activities are dependent upon:

1. teaching method
2. instructional materials
3. instructional media

Competency (performance objective)_____

_____

_____

Learning Activities for the Average Student

1._____

2._____

Rationale:_____

_____

_____

_____

Learning Activities for the Below Average Student

1._____

2._____

Rationale:_____

_____

_____

Transparency 7-1

"Teachers should always:

_____

_____

because:

_____

_____"

SESSION 8

Guiding Students Through a CBVE Program

Time Required:

One 1/2 to Two Hours

Concepts:

learning plans

Instructional Objectives:

Upon completion of this session participants will be able to:

1. orient students to CBVE (comprehension)
2. use counseling techniques (application)
3. develop individual learning plans (synthesis)

Background:

Students must understand competency based vocational education (CBVE). CBVE is a different approach for most students. Students in a CBVE program are expected to take an active part in their learning. Many students will enter a vocational program and be totally unaware of the concepts and procedures of competency based education. Because the CBVE approach differs from most traditional programs, students need to be oriented concerning program expectations and how their role will be different in a competency based vocational education program. Instructors in a CBVE program must provide adequate and appropriate information about the following aspects of a CBVE program:

1. the instructional system
2. the performance assessment system
3. the instructional materials, (audiovisual and printed)
4. the role and responsibilities of the student in a CBVE program
5. the role of the instructor as a resource person and facilitator
6. the procedures that will be used for selecting and developing the individual program an learning plans
7. the record-keeping system which will be used to record competencies, evaluations, materials, equipment, etc.

Usually an orientation program occurs in the first few days of a new enrollment period. Program orientation can be done in a variety of ways such as, instructor and administrator presentations, use of a student handbook, audio-visual presentations or presentations from former program enrollees. Regardless of the approach the orientation procedures must be appropriate to student needs and ultimately motivate and interest them to be successful in their program.

Throughout the duration of a CBVE program instructors are often required to perform counseling activities. Emotional, financial, and personal problems are usually beyond the domain of a vocational instructor and should be referred to the schools' professional counseling staff. A vocational instructor's role in

counseling should relate to the occupational area. Counseling students about setting goals, determining skill levels, managing time in the vocational program area are appropriate counseling activities. When counseling students about program-related issues vocational instructors should use motivational techniques, constructive criticism, encourage open communication, and allow individual students to correct mistakes through trial, experimentation, and practice.

Individual plans are a valuable management tool in a CBVE program. All individual learning plans should be developed according to each person's needs, abilities, personal experiences and goals. Usually there are two types of learning plans:

1. an overall plan which reflects the entire list of competencies in a designated program. Program competencies are often detailed on the student competency profile for the program.

2. shorter learning plans (learning contracts) for a more limited time period such as a 2 to 3 week period, which detail expectations over a set of competencies to be learned within the time period. Flexibility must be built into shorter learning plans to allow for renegotiation if expectations are achieved earlier than expected or not met by the student.

Learning plans must be developed with student input and specify the set of competencies to be learned by the student. When developing individual learning plans care must be taken to insure that the plan has an appropriate time period for completion and a realistic number of competencies. Students should receive a copy of the plan, as a guide for them to manage their time and as a record of accomplishment of identified competencies.

Materials:

Handouts

* "Session #8 Agenda", Handout #8-1
* "CBE Workshop #7 Formative Evaluations", Handout #8-2
* "Some Facts about Learning...", Handout #8-3
* "Major Learning Style Areas", Handout #8-4
* "Needs Assessment for Future Workshops", Handout #8-5
* "CBVE Workshop Evaluation", Handout #8-6

Transparencies

* "Orienting Students to CBVE", Transparency #8-1
* "Program Instructional Plan", Transparency #8-2
* "Developing Your Counseling Skills", Transparency #8-3

Vocabulary:

learning plan- a program plan that is made for each student in a CBVE program specifying the exact number of competencies required for program completion. There are two types of learning plans: an overall plan for the entire program, usually detailed on a student competency profile and a shorter plan or learning contract for a particular period of time.

Procedures:

#1. Allow a few minutes at the beginning of the session for Project EDGE administrators to provide a periodic update on program activities.

#2. Greet the participants and focus on instructional objectives for the session and distribute "Session #8 Agenda". (Handout #8-1)

#3. As a "warm-up" activity, pass out the "CBE Workshop #7 Formative Evaluations Statements" (Handout #8-2). Have the participants review the statements ("Teachers should always_____, because_____") as a review and reinforcement of the concepts covered in Session #7.

#4. Distribute the "Some Facts about Learning", (Handout #8-3) as a review of the importance of using a combination of teaching techniques and methods to promote mastery of concepts. Refer the participants to the learning style assessment worksheet which they completed during the Session #7. Distribute the "Major Learning Style Areas", (Handout #8-4) and review individual learner characteristics for each of the nine areas. Discuss as a group the characteristics and solicit participant input regarding them.

#5. Introduce the concept program orientation, counseling and individual learning plans by using information contained in the **Background** section of this session plan. Have the participants "brainstorm" the elements of a good orientation program for CBVE. Usually the participants will identify the areas identified on the transparency, "Orienting Students to CBVE", (Transparency #8-1). After the "brainstorming" session have two individuals volunteer to role-play an orientation to CBVE. Have one individual play the role of a new student entering the program and one person play the role of the instructor for the program. After a brief role-play critique the orientation using the standards identified in the **Background** section of this session plan. Show the transparency "Program Instructional Plan", (Transparency #8-2), as an example for possible use with students in explaining the procedures that will be used in a competency based program.

#6. Present the role of counseling in a CBVE program by referring to content contained in the Background section of this session plan and by using the transparency " Developing Your Counseling Skills", (Transparency #8-3). The facilitator should also discuss the procedures that should be used to develop overall and short-term learning plans for students. Seek input from the participants as to how they are identifying the scope and sequence of competencies for each of their students. Encourage recognition of previous life and work experiences when detailing the number and the order of instruction for each student on the learning plans. As a motivational technique for some students, it may be important to select easier competencies on the first learning plan. Successful completion of some competencies early in the program will allow students to experience success and motivate them to continue. When developing learning plans it is important to encourage student input. Students can assist

the instructor by specifying the number of competencies which they believe have been mastered through past education and experiences. Instructors must however verify the students' beliefs through individual assessments during the course of the program before a student is certified as competent in the identified competencies.

#7. Summarize the session by reviewing the basic concepts and procedures of competency based education. Since for most students CBVE will be a different approach to learning stress the importance of a good orientation program for student understanding. Review the counseling skills required of vocational instructors in a CBVE and how individualized learning plans can be excellent management tools for the instructor and serve as a guide and record of achievement for each student.

#8. Encourage each participate to complete the handout "Needs Assessment for Future Workshops" (Handout #8-5). Tell the participants that the information will be used by program administrators in the design of future professional development activities.

#9. As a concluding activity, thank the participants for their willingness to express opinions, participate actively in discussions, their overall enthusiasm and interest in the CBVE workshop sessions. Evaluate the CBVE Workshop Series by having participants complete the summative evaluation handout " CBVE Workshop Evaluation", (Handout #8-6).

Events:

1. Project EDGE Update and overview of Project EDGE new enrollee orientation.

2. Provide greeting, session agenda and overview.

3. Perform "warm-up" activity for each individual (Session #7 Summaries).

4. Perform a review by using the handouts on learning and learning styles.

5. Present information on orienting students to CBVE contained in **Background** section.

6. Brainstorm orientation concepts and role-play an orientation session.

7. Discuss counseling skills and individual learning plans by using information contained in the **Background** section.

8. Complete a needs assessment for future professional development activities.

9. Perform an evaluation of the CBVE Workshop sessions.

Evaluation:

Perform a summative evaluation of the entire CBVE Workshop series by having participants complete the "CBVE Workshop Evaluation", (Handout 8-6).

Session #8
Agenda
Faculty In-Service
Date:_____

Performance Goals:

When you have completed this session you should be able to:

1. orient students to CBVE
2. use counseling techniques
3. develop individual learning plans

Schedule of Activities:

Project EDGE Update Program EDGE Orientation	30 minutes
Learning Style Review	30 minutes
Break	
Guiding Students through a CBVE Program	30 minutes
Needs Assessment for Future Professional Development	10 minutes
CBVE Workshop Evaluation Adjournment	10 minutes

Summary of Responses from a Previous Session 7

Teachers should always: keep learning
because: they are in the business of teaching.

Teachers should always: care
because: everything else rests and depends on it.

Teachers should always: make an attempt to discern the learning styles of each of their students
because: they can tailor their teaching methods and classroom activities to best meet the learning needs of the students.

Teachers should always: be aware of each students learning styles
because: it helps to ensure each student learns to his/her potential.

Teachers should always: evaluate the learning styles of the student
because: it helps the teacher be more effective.

Teachers should always: prepare for teaching well
because: it can crucially affect their students. The preparation includes lesson plans, correcting student work, making the environment neat, clean and attractive and deciding the social direction of the class.

Teachers should always: be open to new teaching techniques, ideas, etc. **because**: because what may work for some students may not for others.

Teachers should always: be aware of changing student needs
because: the teaching style and subject matter may need to be altered to fit student needs.

Teachers should always: try to critique their own teaching methods (perhaps by having a peer-teacher) so as to improve upon them. Teachers should always remember to alter their methods to accommodate the individual needs of students
because: no two students are the same.

Teachers should always: consider the audience when they are planning the day because people do learn in different ways. Our goal is to have every student be as successful as possible which means that activities should involve their attributes. When this is done, students will feel they have contributed and feel good about the learning.

SOME FACTS ABOUT LEARNING...

WE LEARN...

10% OF WHAT WE READ
20% OF WHAT WE HEAR
30% OF WHAT WE SEE
50% OF WHAT WE BOTH SEE AND HEAR
70% OF WHAT WE DISCUSSED WITH OTHERS
80% OF WHAT WE EXPERIENCE PERSONALLY
95% OF WHAT WE TEACH SOMEONE ELSE

OTHER RESEARCH (McCLELLAND) SUGGESTS THAT THE AMOUNT OF LEARNING CAN BE GREATLY INCREASED BY CONTROLLED REDUNDANCY OR BY REPEATING THE SAME TEACHING THROUGH A VARIETY OF PROCESSES. FOR EXAMPLE, IF STUDENTS READ, HEAR, AND SEE THE SAME NEW LEARNING, THE RATE OF COMPREHENSION WOULD BE GREATER THAT ADDING 10% FOR READING, 20% FOR HEARING, AND 30% FOR SEEING AS LISTED ABOVE. SO THAT, BY USING REDUNDANCY, THE RATE OF LEARNING USING THESE THREE APPROACHES MIGHT BECOME 70-80% INSTEAD OF 50% AS EXPECTED.

BENJAMIN BLOOM (OF TAXONOMY FAME) MAINTAINS (NOVEMBER 1977, PHI BETA KAPPAN) THAT 95% OF ALL STUDENTS CAN LEARN 100% OF WHAT IS TAUGHT IN SCHOOLS. BLOOM MAINTAINS THAT THE 95% MASTERY LEVEL CAN BE ATTAINED BY SYSTEMATICALLY ADJUSTING LEARNING ACTIVITIES AND TEACHER BEHAVIORS TO RESPOND TO THE BEST LEARNING STYLE OF EACH STUDENT. (OR, DO WHATEVER IS NECESSARY TO ASSURE THAT STUDENTS MASTER YOUR REQUIRED COMPETENCIES). BLOOM GOES ON TO SUGGEST THAT AT LEAST 80% OF THE STUDENTS SHOULD BE MAKING "A" GRADES BY PRESENT TEACHER STANDARDS FOR AN "A".

-ADAPTED FROM A PRESENTATION BY WILLIAM GLASSER BY GARY PHILLIPS, DIRECTOR, LEARNING UNLIMITED, NORTH CENTRAL HIGH SCHOOL ALTERNATIVE PROGRAM

Major Learning Style Areas

1. Auditory Language: This students learns best from hearing spoken words. You may see this student vocalizing or see the student's lips or throat moving while reading, particularly when striving to understand material. This student is more capable of understanding and remembering words or facts if the facts are only learned by hearing.

2. Visual Language: This student learns well from seeing words in books, on a chalkboard, charts in a workbook. This type of student may even write down words that are given orally, in order to learn them by seeing them on paper. This student remembers and uses information better if the information is read.

3. Auditory Numerical: This students learns from hearing numbers and oral explanations. This student may remember phone and locker numbers with ease, and is successful with oral numbers, games, and puzzles. This type of student may do just about as well without a math book, because written materials are not as important. This student probably can work math problems in his/her head. You may see this type of student saying numbers or see the lips moving when reading a problem.

4. Visual Numerical: This student has to see numbers on the board, in a book, or on a paper in order to work with them. This type of student is more likely to remember and understand math facts if the numbers are seen. This student does not seem to need much oral explanation.

5. Auditory-Visual-Kinesthetic (AVK): The AVK student learns best by experience--doing and self-involvement. This type of student needs a combination of stimuli. The manipulation of material along with accompany sight and sounds (words and numbers seen and spoken) will make a difference. This student may not seem to be able to understand, or be able to keep the mind occupied unless totally involved. This student seeks to handle, touch, and work with what is being learned. Sometimes writing or a symbolic wiggling of the fingers is a symptom of the AVK.

6. Individual Learner: This student gets more work done alone. This type of student thinks best and remembers more when learning is done independently. This student cares more for their own opinions that for the ideas of others. This student does not over-socialize during instruction or in a classroom situation.

7. Group Learner: This student strives to study with at least one other student, and does not get much done alone. This type of student values other's opinions and preferences. Group interaction increases learning and recognition of facts. This type of student likes to socialize in classroom situations.

8. Oral Expressive: This student can easily tell you what is known. This student talks fluently, comfortably, and is outspoken. This type of student probably knows more than the tests scores indicate. This student is not shy about giving reports or talking to the instructor or other students. Muscular coordination involved with writing may be difficult for this student . Organizing and putting thoughts on paper may be too slow and tedious for this student.

9. Written Expressive: This student can write essays and goo d answers on tests to show what has been learned. This student is less comfortable, when an oral answer is required. This student's thoughts are better organized on paper than when given orally.

Needs Assessment for Future Workshops

Please rank your desire to further improve your skills in the following areas.
Please circle the number that best describes your interest.
1= No Interest, 2=Little Interest, 3=Some Interest, 4=High Interest

1. Improving your presentation skills	1	2	3	4
2. Managing conflict	1	2	3	4
3. Improving your writing skills	1	2	3	4
4. Improving classroom management techniques	1	2	3	4
5. Working with minority populations	1	2	3	4
6. Improving your instructional execution	1	2	3	4
7. Assessing student performance.	1	2	3	4
8. Using team building and motivation techniques	1	2	3	4
9. Attending technical updates in your program area	1	2	3	4
10. Improving your counseling techniques	1	2	3	4
11. Improving career development techniques	1	2	3	4
12. Using adult development and learning techniques	1	2	3	4
13. Using cooperative learning strategies	1	2	3	4
14. Developing your lesson plans	1	2	3	4
15. Other (please specify)	1	2	3	4

Suggestions for future inservice sessions.

_____

Your Name: _____

CBVE Workshop Evaluation

Please help to improve the quality of future workshops by providing us with your reaction to this workshop series. Circle the letter(s) that best describes your experience with the program.

SD= Strongly Disagree, D= Disagree, A= Agree, SA= Strongly Agree

1. The sessions were well organized.	SD	D	A	SA
2. The material was presented in an interesting and informative manner.	SD	D	A	SA
3. The objectives for the CBVE workshop session were clearly stated and met.	SD	D	A	SA
4. The facilitator reinforced instruction by using a variety of teaching methods and techniques.	SD	D	A	SA
5. The facilitator was considerate of participants needs.	SD	D	A	SA
6. My time spent in the workshop series was well spent	SD	D	A	SA
7. I would recommend the CBVE workshop to other Project EDGE instructors.	SD	D	A	SA

8. What did you like the best about the CBVE workshop session?

9. How could the CBVE workshop sessions have been improved?

10. How has your thinking about CBVE and your role as a Project EDGE instructor changed as a result of the presentations?

11. Comments and suggestions (use reverse side)

Orienting Students to CBE

What Do Students Need to Know?

1. Specific Program Skills (Student Competency Profile)

2. Instructional System
   1. selecting a competency
   2. reviewing and selecting the learning activity
   3. practicing the competency
   4. assessing themselves for proficiency
   5. assessment by instructor
   6. planning for the next competency

3. Instructional Materials

4. Assessment System

5. Facilities and Equipment

Developing Your Counseling Skills

What are the Student's Counseling Needs?

1. Setting Goals
2. Developing Skill Levels
3. Managing Time

When to Counsel vs When to Refer?

1. Motivation
2. Constructive Criticism
3. Open Communication
4. Experimentation

Resources

Several excellent resources were used during the development of the CBVE Workshop Sessions. The materials used during the development stage were as follows:

1. Bradley, Chris E. Friendenberg, Joan E. (1988) Teaching Vocational Education to Limited English Proficient Students. Meridian Education Corporation, Bloomington, IL

2. Competency-Based Individualized Vocational Educational Curriculum (CIVEC) (1985) Instructional Competency-Based Professional Teacher Training Manuals. Addison, IL: Author

- Manual #1: Identify the Characteristics of a Competency-Based Vocational Education (CBVE) Program
- Manual #2: Identify, Verify, and Sequence Job Tasks
- Manual #4: Construct Performance and Written Evaluation Instruments
- Manual #5: Student Learning Guides or Competency Sheets
- Manual #7: Identify Teaching/Learning Strategies and Management Techniques to Implement CBVE
- Manual #9: Orient Students to CBVE
- Manual #12: Monitor Student Progress and Maintain Student Records

3. Crunkilton, J.R. & Finch, C.R. (1989). Curriculum Development in Vocational and Technical Education. Needham Heights: MA.

4. Maryland State Department of Education (1978). Competency Based Vocational Education (EPDA Grant G0037700150). Maryland: Author

- Booklet #1: What is Competency Based Vocational Education (CBVE)?
- Booklet #2: How to Do a Job Analysis
- Booklet #4: How to Write and Use Competency Profiles
- Booklet #9: How to Evaluate Students in a CBVE Program

5. Michigan State Board of Education, Michigan Department of Education, Vocational Technical Education Services. (1976) The Development and Implementation of an In-Service Program on the Use of Performance Based Instruction in Michigan's Vocational Education Programs (Project #4253-7154) Lansing, MI: Author.

- Module #3: Objectives - Referenced Testing
- Module #4: Learning Activities

6. Perry, William G. (1982) How to develop Competency Based Vocational Education Prakken Publications, Inc. Ann Arbor, MI

7. The National Center for Research in Vocational Education, The Ohio State University (1986) Professional Teacher Education Module Series: Series K: Implementing Competency Based Education (CBE)

- K-1: Prepare Yourself for CBE
- K-4: Provide Instructional Materials for CBE
- K-6: Guide Your Students Through the CBE Program